

Criterion: II - Teaching- Learning and Evaluation

Metric : 2.3 Teaching Learning Process



PROBLEM SOLVING

```
Aim:

To calculate the standard deviation of the given values.

Algorithm:

Step 1: Accept the given values

Step 2: calculate

mean = Sum / float (count );

dev = value [i] - mean;

sumsqrt = dev + dev;

variance = sumsqr / float (count);

'stolder = sqrt (variance);

Step 3: Display the result

Step 4: End.
```

OUTPUT

Input values: input -1 to end

34 56:2 12.9 78.0 32 -1

Number of items: 5

CANTA AND A CANTAGE

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A PROPERTY OF THE STATE OF

Mean = 42.620003

stader = 22. 389855

```
Program
# include < io stream . h >
Huichide Leonio. h >
# wielude 2 math. hs
  Const 812 e = 100 ;
int main ()
   int i :
 · clases ();
   contex "Input values: input - 1 to end in;
   int count = 0;
   float value [ size ] ;
   float sum = 0;
   for ci=1; ic= size; i++)
     f
       cui >> value [i] ;
      if ( value [ i] = = -1 )
      break;
      8um + = value [i];
      count + = 1;
   3
  float mean;
  mean = sum / float (count);
  float sumsq = 0;
  double dev;
  for ( i = 1 ; i = count ; 1++)
     ٤
       der = value 5/17 - mean;
```

```
Sum sqr + = dev + dev;

double variance, std dev;

variance = sum sqr / float (count);

std dev = sqrt (variance);

cout 22" Number of item: cout 22" \n";

cout 22" Hean = "11 mean 22' \n";

cout 22" std dev = "22 std dev 22" \n";

get ch co;

return o;
```

TEMPERATURE CONVERSION

Aim :

To convert the given temperature in farenheit into celsions.

Algorithm :

Step 1: Accept the given temperature

step 2 : calculate c = F - 32 / 1.8

8tcp 3: Display the result

step4 ! End.

OUT PUT

Enter the value of F 35

celsions = 9

Enter the value of F 35

celsions = 1

PRINT THE UTIVEN OUTPUT

Aim

to print the given output

Mgorithm

step 1: Accept the given value n

step 2: Display the result

step3: End

OUTPUT

Entir the value for n

5

1
2 2
3 3 3
4 4 4 4
5 5 5 5 5

130

```
Program
#include Liostream. h >
# include cconio. h >
int main ()
  uit n;
 claseres;
  cout 22" Enter the value for n" 22" in";
  cin >>n;
  for Lint i=1; iz=n; i++)
    for L wit j =1 ; j = i ; j++)
       cout zzizc" it;
    cont LL" inin';
 gel-ch cs;
 return o;
```

Aun :

To find the Largest value of two values

Algorithm :

Step 1: Accept the values m and n

Step 2 : check whether m > = n

If it is true, return the value of m.

Otherwise return the value of n

step 3: Display the result.

step4 : End.

Enput values of m and n

Enput values of m and n

Lorgest value = 900

Lorgest values of m and n

Triput values of m and n

S5- 28

Largest value = 55

```
Program
# include Lio stream. hs
# wichede conio. hs
class set
 int min ;
public :
      void input (void );
      void display (void);
      int largest coold);
int set: largest evoid)
   if (m) = n)
   return ems;
   -clse
  retun cn);
void set; : input (void)
  cout Ze "Input values of m and n " ZZ" in";
   cen samsan;
void set : : display ( void )
  cont LL" largest value = "
        Le largest () Le" in";
 int main ()
  set A;
  A. uiput ();
  1. displayes;
   melus o;
```

LARVIEST OF THREE VALUES

Aim

To find the largest of three values

algorithm:

Step 1: Accept the values of a. b and c:

Step 2: check whether as = b

If it is true . check whether as=c.

Il it is time, return the value of a

otherwise relun c

steps: If a>=b if false, check whether b>c

. If it is how return to 00 return c

step4 : Display the result

extra .

Bleps: End.

	7.0	100		34.5
	1000			0.5
	0		. T. A.N.	
14			E 1300 1000	
		20	3 3	
DUT PUT		and c	14	
Input valu	4 356	and c		
Input valu	us of a.	action		
	V		10.5	
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34	in the state of	1110		
	and the second	b. 1.		
H8	1.000			
13,431		15 to 15	7	
Largest va	lue = 18		4.4	
	- 111.	e Zinda	10	
mobile tout	n salas Y			48
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	5140 - 4 4	the believes	1 1 1 1 1	
		¥50. 1	* 95 C	
			85	
		*		
	0.6			
-				
		84		
1		(4		
		19		

```
#include < io 8 keam. h)
# include 2 conio. hs
class set
  unt a.b.c;
 · public :
   void input (void);
   void display (void);
   int largest (void);
 3;
 int set: ! largest (void)
   1
     if (assb)
         if ( a) = c)
        returneas;
        else
        return cco;
    else
      if ( b > = c)
        return (b);
      else
      returnes
```

```
Void set : input (void)
  cout Le Input values of a band ("11" in;
   cui >> a >> b>>(;
void set : display (void)
 cout LL" Largest value = "
      Le largest () Le" In";
int main ()
  set . A:
  1. input co;
   A. display ();
  netuen o:
3
```

duin :

To process the items of the shopping

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Serverge Cabilly Elementate all a

Algorithm .

step 1: Accept the given appropriate numbers

steps: Accept the code and cent of items

steps: calculate the total cost.

step4 : Delete any item

steps: Display all itims

stepb: End.

```
OUTPUT

you can do the following: Enter appropriate number

1: add an item

2: display total value

3: delete an item
```

4: display all items

s: quit
what is your option? I
enter item code: 111.

you can do the following : Enter appropriate number.

1: add an item

2: display total value

3: delete an item.

4: display all items

5: quit.

what is your option? I enter item code: 222 enter item cost: 400

you can do the following : Enter appropriate number 1: add an item.

2: display total value

3: delete an item

4: display all items

5: quit

what is your option? 2 Total value: 600

```
Program
    # include ciostream hs
    # include cconio hs
    comst unt maso:
    class ITEMS
     int ilemcode Emy;
float itemprice [my ;
     int count:
    Public: was been polytic.
     void cNT (void) f count = 013
     Void getitem (void 5
      void display sum croids; in . .
      Void remove (voids por 100) to to the
      void display I tems (void) ing she
    3:
    void ITEMs : get item coolds
against prophabilities social, to another offices were made
     cout cc' Enter item, code : " ...
     cui > sitem code [ count ] 1:11
     cout 20" Enter ilem cost : " 1913 . . .
     cen so item price ciounty ;
     count ++:
    void ITEMs: display sum (void)
        float sum = 0;
```

```
you can do the following : Enter appropriate number
 1: add an item
2: display total value
3: deleti an item
4: display all items
5 : quit
what is your option? 3
enter item code ! 111
you can do the following : Enter appropriate number
1: add an item
2: display total value
3: display an item ....
4: display all items
5: quit. . ( hours come polysis been
what is your option? 4 ----
code pricebiors with just it to harry
222 4001743 madi ist. 1 2 11772 1 mg
you can do the following: Enter appropriate number
1: add an items 123 17 1
2: display total value
3: display an item wing
4 displays all items in the colors
5: quil-
what is your option ? 5
   t Place to receipt and Walance & March Sonal
```

```
for ( int i= 0; 1, count; 141)
sum = sum + item price 117 !
contec" in Total value: "11 sum /1" in";
3
void ITEMs : : Temore (void)
   int a:
  cout L' Enter item code : ;
  un ssa:
  for cuit i=0: i count : 111)
  if ( item code (i) = = a)
  ilem price rij = 0;
void STEMS: display ITEMS (void)
  cout 21" in code price in";
  400 cuit 1=0; 12 count; 111)
 3
-cout 21" (n";
 int moun ()
   BTEMS order;
   order . ent ();
  int n;
do
  cont LL" in you can do the following ";
       ¿ Enter appropriate humber in ";
```

```
cout cc" in1 : Add an item";
cont ec ' \nz : Display total value ":
cout ce" ins : Delite an item";
coul- ce" in 4 : Display all items ";
cout LL" Ins : auit ";
cout ex "Inin what is your option?
 un son:
 Switch (n)
 5
  case 1 : order get ibem () : break;
  case 2: order. display sum (); break;
  case 3: order. remove (); break;
 Case 4: order. display
 getch co: 1
   return oi
 3
```

Aim :

To find the defail about the bank account.

the same of the

Algorithm:

Step: 1 Accept the given name account number and amount.

Step 2: check whether there is any customer with that account no and withdrawn amount is grater than the balance amount.

Step 3: display all dylails

Enter November 128, 1981

Enter amount there is

a many for the second of the s

ames of interesting and a comme

Desire : Tella

```
Enter your choice
 1 - Add an account
2 - withdraw an amount from account
 3 - display all accounts
 1 - wiplay a particular account
 5 - Quit
Enter Mane Bastra
 Enter Account no : 5/4
Enter amount : 10000
Enter your choice
1 - Add an account
2 - withdraw an amount from account
 3 - display all accounts
 4 - ousplay a particular account
5 - Quit
Enter Name : Amra
Enter Account No: 321
Enter amount: 5000
Enter your choice
1 - Add an account
2- withdraw an account from account.
3- Display all accounts
1- Display a particular account
5 - Quil
Enter Name ! Teya
Enter Account no: 472
```

Enter amount: 12000

```
brogram
                                                                                                 Stelly only cars
       Hindude ciostream. h.s.
      Hendude como. hs
       class account
           for the second of the second o
           char name [50] (30);
           int and [507, count;
          gloat balance 1507;
          Public :
                   void wite;
                                                                                             with the company of the
                count = 0 :
       Void deponit ():
       void withdrawnes;
         void displayes
      void display all co;
                                                                                                                    Think a 2
        3:
   (void accounts: deposition)
    30.15
        Coul 22" Enter name "
       cin so name [ count ]
       coul " Enter account no.
        un >> ano [ count ].
                                                                will ettimine
        coul cl Enter amount:
                                    American American tearing
        cui >> balance C count 7
                                                                                                                         A 有12 图
       Count ++ +;
  3
Void account !! with drawn ( )
```

```
Enter your choice
 1 - Add an account
2 - withdraw an amount from a cowint.
3 - wisplay all accounts
4 - Duplay a particular account
  - aut
Enter Name : Deepa
Enter Account no: 912
Enter amount : 7000
Enter your choice
                   1 1 - 1 was
1- Add an account
2 - withdraw an amount from account
3- Display all accounts
4 - Display a particular account
              · < + 4 = 6 · ( + ... | 1900,
5 - anil.
Enter account no diffee amount to be
                           withdrawn
     Enter your choice . .....
1 - Add an account
2. withdraw on amount from account
3- sisplay all accounts
               Action with 1 35 Acres
4. visplay a particular account
            go meson muchal CZ has
5 - Quit
```

```
int a.j.=0,j;
 float b. amt .
 cout 20" Enter account no 7. the amount
                le be withdrawn ";
 cui ssa;
 cui ssaml;
 for ( ) = 0 ; 1 2 count : 1++)
  b = balance [1];
  J=1;
 break : . .
  3
 if ( j == 0)
Lout < c " there is no unslower with the
    busichingiren account no "; in
else
    coul ce" with drawn amount is greater than
       balance amount so we can't withdrawnit;
 else
 balance (ij = b -amt :
tentos se mario de mestos de la como tito.
             void account :: display all ()
  cout L' Name account no Amount "L'e"
  for civil i = 0 : I count : i++)
     cont ex name (1);
```

Name	Account no	1 mount	4.00
		10000	4
Basisa	514	5000	4.5
Amra .	321 .		
Teya	172	12000	
Reepa	910	7000	
	the state of	19000	***
Lakshmi			
Enter	your choice		1
	I an accour	11.	
1- 40	thohaw an a	emount fro	m account
2 - 000	· · · · · · · · · · · · · · · · · · ·	n ls	
3. disp	play all acrow		. ut
a- dis	play a partie	ulai acto	1 1 11
5 - Qui	it. 		. ,
Enter a	ecounter no h	he displaye	d
514			ed s
10 30	787 45 100°	., .	1
Name	1c wuntino	Ancount	•
Basiza	514:	1 10000	
Enter y	our choice	same in	*
12 m			
2	an account	- 1 = E(1) 1	* i e ; l
2 - with	draw an acro	unt from a	count
3 - wxp6	ay all accoun		No.
A - dup	lay a particul	a account	, , , , , , , , , , , , , , , , , , ,
	£		
5	the state of		
			. ,

```
21 ano rij;
                ce balance Fig ce in
coul 22 "
  3
void account :: display ()
  1
   unk a . j = 0 . 1;
   coult 22" Enter account no to be displayed":
   cui ssa:
   for ( 1'=0: ic count ; i+1)
    { If (ano[i)==a)
     break :
 5.
 if (j==1)
   coul L' Name Account no amount
  cout La name [i];
             " LLanorij;
                " ¿ c balance [i];
   coul cc " There is no such
 into main ()
    account ace;
```

```
acc. init ();
into n:
closeres;
do
cout ce " Enter your choice in ";
coult 21" In1 - Add an account ";
coulce" (n2 - withdraw an amount from
conter" in 3 - display all account ";
coult et" In4 - display a particular account;
cout ci" (ns' - quit";
cui ssn:
switch (x)
 case 1 : act & deposit 1);
       break;
 case 2: acc. withdrawn ();
       break;
 case 3 : acc. display all 1);
        break:
case 4: acc . display cs;
        break: .
 case 5 : break :
 default : cont ec' try again in ".
 while (n! = 5)
 getches:
  return o;
```

CHANUIT IN SIUN

Aim :

To overload the wasy minus operator

Algorithm !

step 1 . Accept the values

Step 2: To overload the unasy minus

operator on this value.

slep 3: Display the results

step4 : End.

W. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		2.77
OUTPOT	7.11	
8:10 -20 80	Sec.	
8: 10 -20 80	- 1 - 1 = 11 d 1 d 1 d 1 d 1	
8: -10 20		
	esta tense te quille	
A company of the box	A Comment of the state of the s	
the state of the s	, and the second the	
23-215-4	t garage t pasite	
	1-2-1 1 4 7-1V	
	₹ 30	
14, 150	整	
	5	
89		
5.0		
5		
	25.6	

```
Program
# include ziostream. hs
Hinclude ctonio. 43
class space
  inl. n.
 unit y;
  unt z;
public :
  void getolata (inta, inth. inte);
  void display (void):
  void operator - ();
void space: get data inta, into. cite,
        y = b :
        Z = c .
void space : : display ( void )
  contreyze"
  coulect 2 22"
void space : : operator _ ()
ent main ()
  space 5:
S. getdata (10, 120.30);
cout 20" 5 : ";
 8. displayes;
-8;
Lout 21 " 3:
s. display es :1
setuno;
```

ADDING TWO COMPLEX VALUE

Acmi :

To add two complen numbers usuing

toice

Algorithm:

step 1: Accept the values of real and

imaginary park of two complex numbers.

step? : Add two complex numbers

steps: Display the result

step4: End.

c1 = 2.5 + 3.5 j

```
# include < iostream. h)
 # include 2 conio. hs
 class complen
  float n:
  floaty;
public :
   complex () {}
  complex ( float real, float imag)
   In = real : y = imag : 3
  complen operator + (complen);
  void duplay (vold)
complex complex: operator + (complex ()
 complex temp !
 temp.n = n+c.n;
  temp.y = y+c.y;
 return (temp);
word complen: display ( void)
                        22 4 12" ; " 22 " 12
int main ()
  complen.cl. e2, cs;
 circorco;
 e1 = complex (2.5, 3.5);
 CR = complex (1.6, 2.7);
 C3 = C1 + C2
 cont 21 " c1 =
                   ; c1. dusplay ();
cout 20"
                    ; co. displayes;
contice " cs
                    ; ex. displayes:
gatches;
returno;
```

Aim

the termination of at write a program to overload operators using friends.

Algorithm:

Step 1: 1 ccept a scalar a and a rector - 21.4.2

step 2: Multiply this vector with a scalar to overload * operator using friends

step 3: siplay the result

Joseph Company of the Company of the

step4 : End.

Enter elements of 16 22 m = (5, 16,22) P = (10, 32, 44) 9 = (4, 8,12) the section of the property of the section install and probable to a major first a small

```
Program
# include 210 stream. h).
Hinclude 2 conio. h >
const int size = 3;
class vector
  tint V [ gize ];
public:
   vectores:
  Vector ( wit * no;
  friend vector operator * (int a, vector b);
  friend vector operator * ( vector b, wit a);
  friend is tream & operator >> ( istuam & . vector );
  friend osteam & operator ce isteam & , vectoral
3:
vector: : vector ()
 5
 for (int )=0; 1 + size : i++)
    V[1] =0 : *
vector : : vector ( with a n)
  5
   for lint i=0; (2 size; i++)
       VEIJ = XCIJ;
 vector operator * Lint a, vector b).
    vector c;
  for ( wit i=0; iceize; itt)
    c. vrij = a * b. vrij ;
  refunce;
 Vector operator * (vestor b, vila)
```

```
for ( int 1=0 1 12 8120 : 1++)
    C. VII) = b. VII) Aa;
 return (!
isteam & operator >> ( isteam & din, vector &h)
  for cunt 1=0 ; 12 size ; i+1)
    den ss b. vris;
  return (dun);
ostream & operator 22 (ostream a dout , vector ab)
  dout 22" " 226. VFOJ:
 · for cuitis: i i i z size : i++)
  dout Le " L c b. v rij;
 dont ec";
  return (dout);
int a [size] = {2,4,69;
into main ()
  vector m:
  vertor n=n;
  circer cs :
  cont 22" Enter elemente of rector m " cc" in";
  cui ssm;
 cont 22 1 1 ";
  coul- 21" m = " 12m 22" (n";
  Vector P.I;
              "LEPEL" In"
conf 21" 4 =
getch ();
return o:
```

ADD TO COMPLEX NUMBER (USINUM FRIEND FUNCTION)

Aun :

To add two complex numbers using friend function.

Algorithm:

Step 1: Accept the values of real and imag parts of two complex numbers.

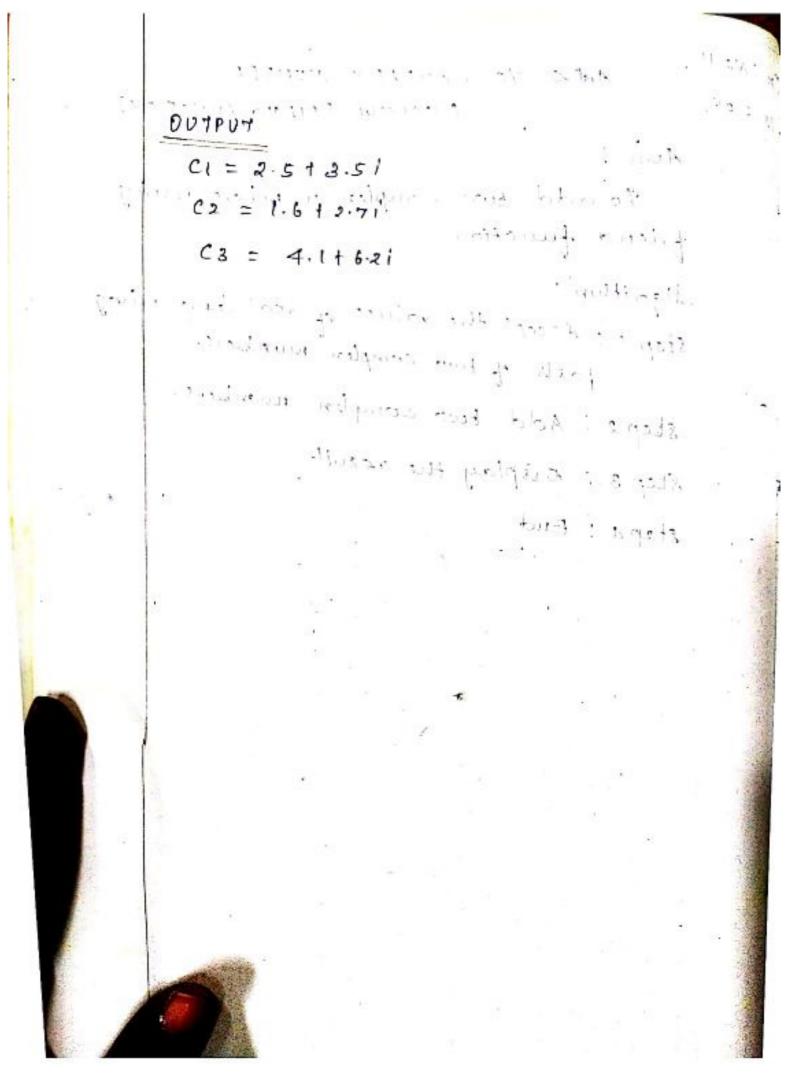
step 2: Add two complex numbers.

Step 3: Display the result

Some I'm a make

Taken to Themp I'm

step 4 : End.



Scanned with CamScanner

```
brodram
#include Liostream. hs
# circlide & conio. hs
class complex
 6
   float niy;
public :
complenes (3
complex (float real , float imag)
  { n=real ; y=imag; }
 friend complex operator (complex. complex)
 void display (void):
5 ;
complen operator + (complen a, complen b)
    complex temp;
    temp. n = a.n+b.n;
    temp y = a.y 1 b.y :
    return (temp):
 void complen: display (void)
  2
   contecnes "+L" zey se"in";
 int main ()
  complex c1, c2, c3;
  ci = complex c2.5, 3.5);
   c2 = complem (1.6,2.7);
   C3 = operator 1 Cc1. (1);
  cont 11" (1 = "; c1 . display ();
  confoc"cz = " ; cs. diplayes;
  cont 2 1" (3 = " ; c3 . display ().
  geich ();
  return o;
```

Aim :

To multiply two complex numbers using operator overloading

Algorithm!

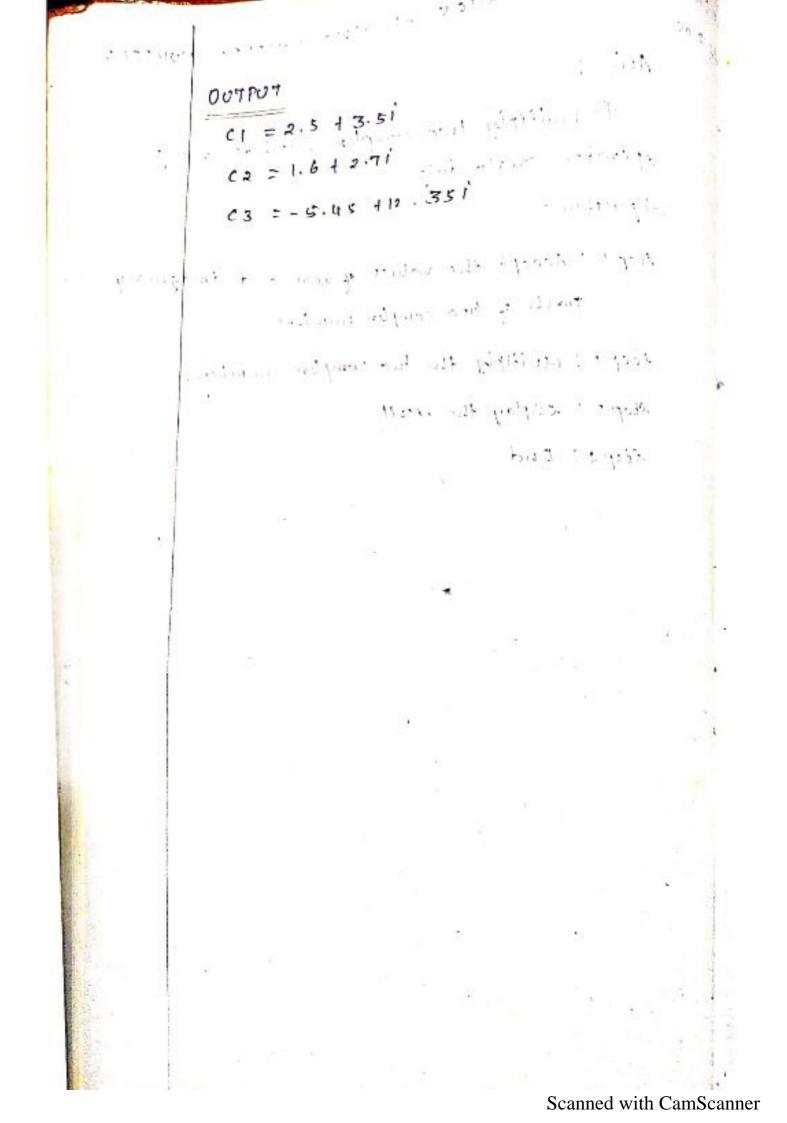
Step 1: Accept the values of real and imaginary parts of two complen numbers.

step 2: multiply the two complen numbers.

Step 3: Display the result

Step 4: End.

Tribunt Comp 3



```
program
# include ciostream. h)
# wichide / conio. hs
class complen
 floor niy;
public :
 complex () { }
complex (float real, float imag)
 In = real i y = imag : 2
complex operator * (complex);
 void display (void):
3:
complex complex :: operator * ( complex c)
 complex temp:
 bemp. n= n x c.n - y x c.y;
temp. y = n x c.y , ty x c.n;
 return ( temp);
3
void comple : : display (void)
 £
contecnec" + " Lly LL" i"
 3
int main ()
complex c1, c2, c3!
 claseres: .
ci = complex (2.5, 3.5);
 cz = complac 1.6,2.73;
 (3 = c1 xc2;
cont 20" ce = "; ct. displayes;
               " ; c2 displayes;
cout 20" c2 =
                " : c . diptay cs.
 cout LL " L3 =
 getch cs >
 retumo;
```

MULTIPLICATION OF TWO COMPLEX NUMBERS Cosing Friend Function) 1100 Ain: To multiply two complex numbers using friend function Algorithm : Step 1: Accept the values of real & imaginary park of two complex numbers. Step 2: Multiply two complex Numbers. steps: sisplay the result. Step 4 ! End.

DUTPUT

$$C1 = 2.5 + 3.51$$
 $C2 = 1.6 + 2.71$
 $C3 = -5.45 + 12.351$

are the second

```
broken
Hinalude ciostuam. hs
# include conio. hs
class complen
  proof niy;
Porblic :
  complex () 63
 complex (float real, float Imag)
{n = real; y = imag; }
friend complex operator x ( complex, complex)
void display (void);
complex operator x (complex or, complex b)
  complex temp:
  temp. n = a.n & b.n - a.y + b.y;
  temp. y = a. n x b.y + a.y xb.x;
  refunctemp);
void complex :: display (void)
  contenec" + "ecyce"; "ec'in
 int main ()
   complex C1, C2, C3
   c1 = complex (2.5, 3.5);
   er = complex (1.6,2.7);
    cs = operator * ccl. cs);
  cont 11" (1 = " ; (1. display 1);
  cont cc" cz = " ; cz . display c;
  cont el' (3 =
                  " : cx. displaye,.
  getch cs;
 returno;
```

Add a been to pleasing

Aim

To maintain and display library details using friends.

digorithm :

glep 1: Accept the details of book stored in the library

Bleps: Maintain the details

TISTALL PITTINGPLEM CARREST

to do of the fireman a book of

Unlinea to deep controlled a confession to the t-

distribution of the last true of patents. "

3. stipling all best details.

Stop3: ou play the result

step4: End.

trice there is a a complete track the complete track track tracks the complete tracks the

chanded a head a library

Polery pairs of the been been

```
DUTPUT
  1. Add a book to library
2. display a particular book details
 3. wiplay all book details
 1. check whether a particular book is amilaly
 5 . Init
 Enter your choice
 Enter Beelt no :111
 Enher brok name : alighra
 Enter author name : armugain
 Enler price of the book : 150
 LIBEARY MANAGEMENT
  1. Add a book & library
 2. Duplay a particular book details
 3. Display all book defails
 4. sheek whether a particular book is available orner
 5. Enit
Enter your choice
Enter book no : 222
Enter book name : complen
Enter author name: I ssa c
Enter price of the book : 200
   LIBRARY MANAGEMENT
1. Add a book & library
2. Display a pasticulas book alitaile
3. ousplay all book details
4. eleck whether a pastrentar book is available or
```

```
program
 # include < 10 steam. hs
 # include zeonio. hs
 # wichole 28tring. hs
 class lib
 5 ...
   int bno [20]:
   chas bname [207 [307 :
   chas aname [207 [307:
   float price 1207:
           The second state of the second second
   public !
  void wit () { count = 0; 3
  void add();
  roid display all (1)
  void findlis ins
  void display ();
  void lib : : addity I war in .....
            possible of soul a tiet
          in Enter book no !
   cun ss bno count J;
cout < 1' In Enter book name :
   ein 33 b name [ wunt 7 ;
   coul x2 in Enter author name ."
   cin >> a name count 7:
 Cour ex in Enter price of the book : ";
  cin ssprice counts;
count + + + + to down in front moving was
```

```
Enter your choice
Enter the book no a be displayed
       Boot name Authorname
                                  Prica
222
                     IMAL
        complen
 222
LIBRARY MANAMENENT
 1. Adda beek a library
2. sisplay a particular back obstacts
 3. Display all book details
 A. check whether a particular book is available on
 y. Enit
 Enter your choice
 3
                  Authornami price
        Bookname
 Bookno
                    aimigam 150
         alegiona
 [1]
         complen
  211
  LIBRARY M ANAMEMENT
 1. Add a book is library
 s. ouplay a particular book details
 2. display all book default
                  a particular book is available on
  4. check whether
  5. Exit.
  Enter your sholle ....
              A marie to a making a gray of the
  4
  Enter the book name to be staplayed tound
  alegbra
  The given book is available in our library
```

```
void lib: : display (?
             growani a gala a water d
     with a flag in my a gold .
      cout er Enter the book no to be out
     un ssa:
     for (i=0 ; 1 2 count ; i++)
                     continuity of the
       1
        If (a = = bnotin)
       the graph and the state of the state of
                                3 . . . 1 .
         flag = 1 i
with the the streater; that is dead strucky will
                 THE PARTY PROPERTY OF THE
         3
     if (flag = = 1) , a soul a black
     well-to and whether a polytic ?
     coul ( fil) n. Book no Book name Authorname
                                 price in ";
     is done refinishing to entirely to side
    COUNTY LL bno Fig ;
      cont el " el brame pisti.
     cout LL" " LL aname riy;
      cout e e " L' price ris !
                       income part much
      3
                 CRAIL FIARA MENENT
           Litters to theer to library
      Coult 22 In There is no book available for that book no ;
             that book no is policion .
remaining the state of the same is
   1 103-20
                             1 3 25 3 2
     void lib :: find c's
                       to ker your them
     to the second of the last
```

LIBRARY MANAGEHENT 1. Add a back h library 2. ouplay a particular book detack 3. piplay all book delacte 4. efect whether a particular book is available or not 5. Emil Enter your choice Enter the book name to be found 4 (4.15) Tamil The given book is not available in our library LIBRARY MANAGEMENT 1. Add a book to library 1: 2. Display a particular book details 3. ouplay all book details 4. sheck whether a particular book is available or not 5 . Emile a marie ! Enter your choice. Error Try again LIBRARY MANA GENERAT 1. Ada a book to library
2. Duplan a particular book difaits 3. Display all book details 4. check whether a pariticular book is available 5. Emil no may be all know they Enter your choice

```
char 6 [307 ;
uit flag ;
 flag =0 ;
cout 20" in Enter the bookname to be found";
 cen ssb;
for ( i = 0 : i 2 count : i++)
5
  if ( stremp (b, name [i]) = = 0)
  4
   tlag = 1:
    break ;
 else
  flag = 0 :
  3
 3.
 if (flag = =1)
  ٤
 cout 21" in The given book is available in one
           library ";
    3
                  enter your to
  else
    cout Le" in the book is not available in
   ~
                           one library";
    3
  3
  void lib: : displayall ()
   Cout LL" in Book no Book name Anthorname
```

```
for (1=0; recount; i+1)
 cont echnoris;
 cout 22" " 11 bnamirin:
cent ez" " , i porce (17;
 cout et " in";
vovad maus ()
 drscre);
 lib 1;
 Limites:
 int e:
 do
 cout ze" In LIBRARY MANAGEMENT IN";
 cout 12" in 1. Add a book a library ";
 cout 20" ( n2. Display a particular Look details?
 cont LL "In3. Display all Look defails":
 cont ce" (n4. check whether a pasticular book
              is available or not";
 cout Li ins. Emit;
 cont ec" inin Enter your choice :
 un >> c:
  switch (C):
    case 1 :
         1. add ();
```

```
case 2:
   1. display (); break:
case 3!
   1. diplayall(); meal ;
case 4:
   1. Buid es ; break ;
core 5:
    break;
default :
                     try again ";
 cout 21" in Error.
 3 while ( ( 1 = 5);
   getchi);
  returno;
3
```

DATA CONVERSION 10 maintain stock details using class. Step 1: Accept the item name, code, value Algorithm: and price Step 2: Maintain the details using class step3: sisplay the result step4 : End. out · who

DUTPUT

product details - invent 1 type

Items : 5

Stock value

product detail

value : 100

```
program
# include 210 stream. hs
# include ccomio. hs
 dass vivent 2;
class invent 1
  int code
  int items :
   float price :
public :
  inventi (inta, intb. intc)
    code = a:
    items = b;
    price = c:
 void put data ()
   £
                   Le code Le "In";
  cout ec" code :
  Cout 21" Items: " 22 items 20" in ";
  cout « L" value: "Le price LL" In";
  int get code () { return code ; 3
  int get items () { return items ; }
  int getprice () & return price : 3
  operator float () fretun citems * prices; 3
   5;
   class invent 2
     inte code :
     float value:
```

```
V/11.
public :
carentec;
code = 0 ; value = 0 ;
invent , ( Lith, float y)
  3
  code = n;
  value = y:
 3
void putdata ()
 cout ce code : " Le code Le in";
 cout 21" value: " 12 value 21" In In";
  5
 invente (invent) P)
   code = P. gatsode ();
   value = p. getitem () * p. get price ();
 3:
int main ()
   invent 1 31 (100, 5, 140.0);
   inventa, di;
   float total - value;
   be total-value = s1;
        dt = 91;
 cont zz" product details invent 1 type " ze"in";
   SI pubdaba co;
```

```
cout << " In stock value " << "In";

cout << " value = " << total - value << " Inin";

cout << " product details - circuit > type " << " In";

d1. put data();

getch();

return o;

3
```

Enter awards card travel 12

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Parker Internation

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COSTNER AMERICAN LECTO

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Acm :

To Maintain employees information using inheritance.

Algorithm :

Step: 1. Accept employee's name, basic pay, deduction.

step: 2 calculate DA. FIRA, TA, LIC, PF

8tep4: End

Enter empro and name :10 Enterbasic pay, decemen allowance, travellin house rent allowance. 500 Enter provident fund and his details 1000 500 number:10 name : Roja Basic pay: 10000 Deaners Allowance: 200 Travelling allowance : 500 Housement Allowance : 300 peduction details : provident fund 100 LIC :500 gross pay :11000

net pay : 9500

```
Program
Hinchedo 210 stream. hs
# include cionio. hs
class tamp emp
public :
 int empro:
 char empro:
  void gates;
  void putes;
Void emp : ! get ()
 cout ce" in Enter empro, and name
ciù so empro ;
 un soname;
 3
void emp !: put
 1
 coul zc' Number : " zc empro;
 cout 20" Name : "cename
class salary : public emp
public:
float BP;
  float DA , TA , HRY
```

```
Bloat PF, Lie;
 void getich;
  void puties;
void salary :: getic)
cout et " Enter basic pay, wearner allowans,
      Travelling allowance, House rent allowance
CUA SUBPSSON SS TA SS HEA;
Cout 22" Enter providunt fund and
                    LIC details ";
an SSPFSSLIC
3
void salary : : puti()
coul ec" in Basic pay : " LLBP ;
cout as "In Dearness Allowance: "LIDA;
cout Le" in Travelling Allowance: "LLTA;
cont ze'in House rent Allowance: " ZEMEA!
cout 12'in adduction artails : ";
cout 12 'In providunt fund : " 12PF
                      : " cclic";
cout Le in Lie
3
dans Netsalary : public . nalory
public :
  float us:
  Block NF;
```

```
void netsal ()
  UF = BP + AA + TA + HRA;
 cout it "In wrom pay: " LI WF;
 Loub et" in Natipay !
   net salary ns;
   ns. getc);
   ns. getics;
   ns . putc);
   ns. putico;
   hs. netsalls;
   getch es;
3
```

STUDENT FILE

write a program le create student sile

Algorithm:

Step 1: Accept the information of students

III ander mini

Soule Triple Welling

step 2: create a student tile

Steps: Display the results

Step 4 : End

DUTPUT

Enter details for three students

Enter name : Basira

Enter roll no : 111

Enter m1. m2 : 80 70

Enter name : Amra:

Enter rolling: 450

Enter m1, m2: 92 96

Enter name : Tuya

Enter rollno : 222

Enter m1, m2 : 96 98

Basira 111 80 70 150

Amra 450 92 96 188

Jeya 222 96 98 174

```
brodown:
 # include 210 stream. h)
 # include < 1 stream. h)
# in clude 210 marip. h )
# include 2 conio. h)
 class studentsile
 chai name [20];
 int rollno;
 wit mij ma;
 int total ;
public :
   void readdata croids;
   void wilkdatacroids;
 3;
void student fuli: readdata (void)
 Ł
 cout <2" (n. Enter name: "; un siname;
 cout ex" in Enter rouno : "; cin so rouno;
 cout ce "In Enter mi, m2: "; un ssmissmi;
 3
void studentfile : : wailedata (void)
 £
  total = mi +m2;
  coul. Le setion flags lios: lett)
    22 setw(10) 22 name 22 setrosflags (105: 17)
    2 L Set w (10) Le vollno Le si presision (2) LE set wild
     Lamica 1t " cema
    22 Setiosflags ( )65: High ) 22 set w(16) 22
                               total ec end 1;
```

```
int main ()
 uit total;
 claseres:
 student file marks 137 ;
 1 steam file :
 file open (" stu dat", los : willos "out);
 cout it " Enter details for three students in";
 for tuit i = 0; iza: itt)
  marks [17. read data ();
 file write ( t chas a ) & machili7.
                     size of (machs (17)):
3
file . seekg (0):
cout ec'in output inin";
for (1=0; ic 8; i+1)
 1
 tele read (char 1) & marks Fig, size of
                          (mails rij));
   marks [i] . writedatas;
fele. close cs;
getch c ;
```

Acin:

To maintain employee's information using files

THEFT

ting this rates.

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ment and volume

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PERSONAL PROPERTY.

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Algorithm:

8tep 1: Accept employees details

Step 2: Maintain this using files

Step 8: Display the result

Step4 ! End

```
DUTPUT
enter details for three employees
enter no of items
enter empro!1
enter bp : 1000
center ded : 200
center name: rahul
enter empro: 2
enter bp: 1000
enter ded : 300
enter name: roshan
enter empro: 3
enter bp:100
enter ded: 500
```

radha

3

```
Algorithm
#include 2 iostream. h >
Hinduole &fstream . h)
# include ciomanip. hs
Hinchide 2 conio. hs
class employee
chai name [107;
int empro ;
float bp . ded , allow .
float gp;
public:
  void readdata (void):
  roid waitedata croids;
5;
void employee :: read data ( void )
 cout ec" enter name :
 cin ss name;
 cout 22" enter empro: ";
 cin ssempno;
"cout 22" enter bp :
  cin 33 6P;
 cout <2" enter ded : ";
 3
 void employee :: writedata ( void)
  allow = 0,10 x bp;
   gp = allow + bp - ded;
 coul el setiosflags (108 / right) Le setweres cename
   22 setiostiags lios: loight ) 22 set will 12 compro
```

```
LL setrosflags (ios: right) 2 (set precision(2)
                              22 Set-willog 22 bp
 EL setios flags (ios: oright) 21 set precision (2)22
                        setwerns 22 ded
 2 c setios flags (los: right) 21 set precision (2)
                       er est willos er allow
 21 setiostlags (ios: night) 12 selpredision (2)
                        LL ENTWLIOD ZEJP
   24 endl;
 roid main ()
  int size;
 employed item [10];
 Urseres;
 of stream file ;
file - open (" emp. dat", ios: in lios: : out);
rout Le" enter détails for three employées (n';
cout et " enter no of items " ec " in";
un 13 size;
for cuit 1=0; icaize; itt)
 item (i). read data();
file. write (( shar + ) & item (i), size of Litema)))
ful. seek g (O);
coul ce" in output in in";
 for ( 1 = 0; 1 c s) 20; 1++)
 file read ( char + ) to item rig , size of
                               ( item (1) )) i
```

item Fig. writedators; fil . close co; getches: