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```
Start here x 01.cpp x
1  /*Classes And Objects*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      int a,b;
8  public:
9      void getdata(int x,int y)
10     {
11         a=x;
12         b=y;
13     }
14     void showdata()
15     {
16         cout<<"a="<<a<<"b="<<b;
17     }
18 };
19 main()
20 {
21     complex c1;
22     c1.getdata(3,5);
23     c1.showdata();
24 }
25
26
```


Output :

"C:\Users\Hp\Desktop\Arsh programs\01.exe"

```
a=3b=5
Process returned 0 (0x0)   execution time : 0.047 s
Press any key to continue.
```

```
Starthere  X  01.cpp  X  2.cpp  X
1  /*Inline Function*/
2  #include<iostream>
3  using namespace std;
4
5  inline mul(float x,float y)
6  {
7      return(x*y);
8  }
9  inline div(float m,float n)
10 {
11     return(m/n);
12 }
13 int main()
14 {
15     float a=30.5,b=54;
16
17     cout<<mul(a,b)<<endl;
18     cout<<div(a,b)<<endl;
19 }
20
```

Output :

 "C:\Users\Hp\Desktop\Arsh programs\2.exe"

1647
0

Process returned 0 (0x0) execution time : 0.094 s
Press any key to continue.

```
Start here x *Untitled1 x 2.cpp x 3.cpp x 4.cpp x 5.cpp x
1  #include<iostream>
2  #include<math.h>
3  using namespace std;
4  power(float m,int n)
5  {
6      float t;
7      t=pow(m,n);
8      return t;
9  }
10
11  main()
12  {
13      float a;
14      int b;
15      cout<<"Enter the number and its power";
16      cin>>a>>b;
17      cout<<power(a,b)<<endl;
18  }
19
20
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\3.exe"
Enter the number and its power3
2
9
Process returned 0 (0x0)   execution time : 5.898 s
Press any key to continue.
```

```
Start here x 3.cpp x 4.cpp x 5.cpp x 6.cpp x 7.cpp x
1  #include<iostream>
2  using namespace std;
3
4  sum(int a,int b)
5  {
6      return(a+b);
7  }
8  sum(int a,int b, int c)
9  {
10     return(a+b+c);
11 }
12
13 main()
14 {
15     int m,n,o,t,y;
16     cout<<"Enter the values of 3 numbers to be added";
17     cin>>m>>n>>o;
18     t=sum(m,n);
19     y=sum(m,n,o);
20     cout<<t<<"\n"<<y;
21 }
22
23
```

Output :

"C:\Users\Hp\Desktop\Arsh programs\4.exe"

```
Enter the values of 3 numbers to be added3
4
5
7
12
Process returned 0 (0x0)   execution time : 3.942 s
Press any key to continue.
```



```
31 {
32     time t1,t2,t3;
33     t1.gettime(2,45);
34     t2.gettime(3,30);
35     t3.sum(t1,t2);
36     t1.puttime();
37     t2.puttime();
38     t3.puttime();
39 }
40
41
```

Start here x 3.cpp x 4.cpp x 5.cpp x 6.cpp x 7.cpp x


```
1  #include<iostream>
2  using namespace std;
3
4  class time
5  {
6      int hours;
7      int minutes;
8  public:
9      void gettime(int h,int m)
10     {
11
12         hours=h;
13         minutes=m;
14     }
15     void puttime(void)
16     {
17         cout<<hours<<"hours and";
18         cout<<minutes<<"minutes";
19     }
20     void sum(time,t2);
21 };
22 void time :: sum(time t1,time t2)
23 {
24     minutes=t1.minutes+t2.minutes;
25     hours=minutes/60;
26     minutes=minutes%60;
27     hours=hours+t1.hours+t2.hours;
28 }
29
30 int main()
```

"C:\Users\Hp\Desktop\Arsh programs\6.exe"

```
2hours and45minutes3hours and30minutes6hours and15minutes
Process returned 0 (0x0)   execution time : 0.078 s
Press any key to continue.
```

```
Start here X 3.cpp X 4.cpp X 5.cpp X 6.cpp X 7.cpp X
1  /*Primitive to class type */
2  #include<iostream>
3  using namespace std;
4  class complex
5  {
6      int a,b;
7  public:
8      complex()
9      {
10
11      }
12      complex(int k)
13      {
14          a=k;b=0;
15      }
16      void getdata(int x,int y)
17      {
18          a=x;
19          b=y;
20      }
21      void putdata()
22      {
23          cout<<"a="<<a<<"b="<<b;
24      }
25  };
26
27  main()
28  {
29      complex c1;
30      int x=5;
31
32
33      c1=x;
34      c1.putdata();
35  }
```

Output :

 "C:\Users\Hp\Desktop\Arsh programs\7.exe"

```
a=5b=0
Process returned 0 (0x0)   execution time : 0.078 s
Press any key to continue.
```



```
Start here x 8.cpp x 9.cpp x 10.cpp x 11.cpp x 12.cpp x 13.cpp x 14.cpp x 15.cpp x
1  /*class type to primitive type*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      int a,b;
8  public:
9      void getdata(int x,int y)
10     {
11         a=x;
12         b=y;
13     }
14     void putdata ()
15     {
16         cout<<"a="<<a<<"b="<<b;
17     }
18     operator int()
19     {
20         return(a);
21     }
22 };
23
24 main()
25 {
26     complex c1;
27     c1.getdata(4,8);
28     c1.putdata();
29     int x;
30     x=c1;
31
32     cout<<"x="<<x;
33 }
34
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\8.exe"
a=4b=8x=4
Process returned 0 (0x0)   execution time : 0.062 s
Press any key to continue.
```

```
Start here X 28.cpp X 9.cpp X
1  /*Class To Class Type*/
2  #include<iostream>
3  using namespace std;
4
5  class product
6  {
7      int m,n;
8  public:
9      void getdata(int x ,int y)
10     {
11         m=x;
12         n=y;
13     }
14     int getM()
15     {
16         return(m);
17     }
18     int getN()
19     {
20         return(n);
21     }
22 };
23 class item
24 {
25     int a,b;
26 public:
27     item()
28     {
29
30
```

```
31     item(product p1)
32     {
33         a=p1.getM();
34         b=p1.getN();
35     }
36     void showdata()
37     {
38         cout<<"a="<<a<<"b="<<b;
39     }
40 };
41
42 main()
43 {
44     product p2;
45     item i1;
46     p2.getdata(5,8);
47     i1=p2;
48     i1.showdata();
49 }
50
```

```
"C:\Users\Hp\Desktop\Arsh programs\9.exe"
a=5b=8
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```

1  /*Parameterized Constructor*/
2  #include<iostream>
3  using namespace std;
4
5  class point
6  {
7      int a,b;
8  public:
9      point(int x,int y)
10     {
11         a=x;
12         b=y;
13     }
14     void showdata()
15     {
16         cout<<"a="<<a<<"b="<<b;
17     }
18 };
19
20 main()
21 {
22     point p1(3,2),p2(6,5);
23
24     p1.showdata();
25     p2.showdata();
26 }
27

```

Output :

"C:\Users\Hp\Desktop\Arsh programs\10.exe"

```

a=3b=2a=6b=5
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.

```

```
Start here X 11.cpp X 12.cpp X 13.cpp X 14.cpp X 15.cpp X
1  /*Copy Constructor*/
2  #include<iostream>
3  using namespace std;
4
5  class idea
6  {
7      int a,b;
8  public:
9      idea () {}
10     idea (int x)
11     {
12         a=x;
13     }
14     idea (idea &e)
15     {
16         a=e.a;
17     }
18     void showdata ()
19     {
20         cout<<"a="<<a;
21     }
22 };
23 main ()
24 {
25     idea i1 (100);
26     idea i2 (i1);
27     idea i3=i1;
28     i1.showdata ();
29     i2.showdata ();
30     i3.showdata ();
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\11.exe"
a=100a=100a=100
Process returned 0 (0x0)   execution time : 0.047 s
Press any key to continue.
```

```
Start here X 12.cpp X 13.cpp X 14.cpp X 15.cpp X
1  /*Use Of Destructor*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      int a,b;
8  public:
9      ~complex()
10     {
11         cout<<"Arsh Goyal ECE 2nd Year";
12     }
13 };
14
15 main()
16 {
17     complex c1;
18     cout<<"\n";
19     complex c2;
20     complex c3;
21 }
22
```

Output :

"C:\Users\Hp\Desktop\Arsh programs\12.exe"

```
Arsh Goyal ECE 2nd YearArsh Goyal ECE 2nd YearArsh Goyal ECE 2nd Year
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here X 15.cpp X 13.cpp X 14.cpp X
1  /*Friend Function to add data*/
2  #include<iostream>
3  using namespace std;
4  class CSE;
5  class ECE
6  {
7      int a;
8  public:
9      void getdata(int x)
10     {
11         a=x;
12     }
13     friend void add(ECE,CSE)
14     ;};
15     class CSE
16     {
17         int b;
18     public:
19         void getdata(int y)
20         {
21             b=y;
22         }
23         friend void add(ECE,CSE) ;
24     };
25
26     void add(ECE e1,CSE c1)
27     {
28         cout<<"The sum is ="<<e1.a+c1.b;
29     }
30     main()
31
32     {
33         ECE p;
34         CSE q;
35         p.getdata(6);
36         q.getdata(7);
37         add(p,q);
38     }
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\13.exe"
The sum is =13
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here  X  15.cpp  X  14.cpp  X
1  /*Single Inheritance*/
2  #include<iostream>
3  using namespace std;
4
5  class A
6  {
7      int a;
8  public:
9      int b=5;
10
11      };
12  class B : public A
13  {
14      int c=6;
15  public:
16      B() {
17          cout<<"The result is"<<b*c;
18      }
19  };
20  int main()
21  {
22      B b1;
23
24  }
25
```

Output :

```
Select "C:\Users\Hp\Desktop\Arsh programs\14.exe"
30
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here x 15.cpp x
1  /*Multilevel Inheritance*/
2  #include<iostream>
3  using namespace std;
4
5  class student
6  {
7  public:
8      int rollnumber;
9      void getnumber(int a)
10     {
11         rollnumber=a;
12     }
13     void putnumber(void)
14     {
15         cout<<"The Roll Number Is"<<rollnumber;
16     }
17 };
18
19 class test :public student
20 {
21 public :
22     int d,e;
23     void getmarks(int x,int y)
24     {
25         d=x;
26         e=y;
27     }
28     void putmarks()
29     {
30         cout<<"Marks in Subject 1="<<d<<"and in 2="<<e;
```

```
31     }
32 };
33 class result :public test
34 {
35 public:
36     int total;
37     void display()
38     {
39         total=d+e;
40         cout<<"The total marks are"<<total;
41     }
42 };
43
44 main()
45 {
46     result r1;
47     r1.getnumber(15);
48     r1.getmarks(99,100);
49     r1.display();
50 }
51
```

```
"C:\Users\Hp\Desktop\Arsh programs\15.exe"
The total marks are199
Process returned 0 (0x0)   execution time : 0.016 s
Press any key to continue.
```



```
Start here X 16.cpp X 17.cpp X 18.cpp X 19.cpp X 20.cpp X
1  /*Multiple Inheritance*/
2  #include<iostream>
3  using namespace std;
4  class Engineering
5  {
6  public :
7      int a,b;
8      void getdata(int x,int y)
9      {
10         a=x;
11         b=y;
12     }
13 }
14 };
15
16 class ECE :public Engineering
17 {
18 public:
19     int c,d;
20     int multiply()
21     {
22         cout<<"The result is"<<a*b;
23     }
24 };
25
26 class Arsh :public Engineering
27 {
28 public :
29     int e,f;
30     int sum()
```

```
31     {
32         cout<<"The Result is"<<a+b;
33     }
34 };
35
36 main()
37 {
38     ECE e1;
39     Arsh e2;
40     e1.getdata(5,6);
41     e1.multiply();
42     e2.getdata(5,3);
43     e2.sum();
44 }
45
```

"C:\Users\Hp\Desktop\Arsh programs\16.exe"

```
The result is30The Result is8
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```

1      /*Hybrid Inheritance*/
2      #include<iostream>
3      using namespace std;
4
5      class student
6      {
7      public:
8          int rollnumber;
9          void getdata(int x)
10         {
11             rollnumber=x;
12         }
13         void putdata ()
14         {
15             cout<<"Roll Number"<<rollnumber;
16         }
17     };
18     class test:public student
19     {
20     public:
21         int p,q;
22         void getmarks (int m,int n)
23         {
24             p=m;
25             q=n;
26         }
27         void showmarks ()
28         {
29             cout<<"Marks in subject 1="<<p<<"and in subject 2 ="<<q;
30         }
31     };
32
33     class sports
34     {public:
35         int w;
36     public :
37         void dange(int h)
38         {
39             w=h;
40         }
41         void putscore ()
42         {
43             cout<<"Sports="<<w;
44         }
45     };
46
47     class result : public test,public sports
48     {
49     public:
50         int total;
51         void display ()
52         {
53             total=p+q+w;
54             cout<<"Hence the total marks are="<<total;
55         }
56     };
57     main ()
58     {
59         result r1;
60         r1.getdata (15);
61
62         r1.putdata ();
63         r1.getmarks (23,45);
64         r1.showmarks ();
65         r1.dange (34);
66         r1.putscore ();
67         r1.display ();
68     }

```

"C:\Users\Hp\Desktop\Arsh programs\17.exe"

```

Roll Number15Marks in subject 1=23and in subject 2 =45Sports=34Hence the total marks are=102
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.

```

```
Start here X *18.cpp X 19.cpp X 20.cpp X
1  /*Operator Overloading-Binary*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      int a,b;
8  public:
9      void getdata(int x,int y)
10     {
11         a=x;
12         b=y;
13     }
14     void showdata()
15     {
16         cout<<"a="<<a<<"b="<<b;
17     }
18     complex operator+(complex c)
19     {
20         complex temp;
21         temp.a=a+c.a;
22         temp.b=b+c.b;
23         return(temp);
24     }
25 };
26
27 main()
28 {
29     complex c1,c2,c3;
30     c1.getdata(3,7);
31
32     c2.getdata(4,8);
33     c3=c1+c2;
34     c3.showdata();
35 }
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\18.exe"
a=7b=15
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here x 19.cpp x 20.cpp x
1  /*Unary Operator Overloading*/
2  #include<iostream>
3  using namespace std;
4  class complex
5  {
6      int a,b;
7  public:
8      void getdata(int x,int y)
9      {
10         a=x;
11         b=y;
12     }
13     void showdata()
14     {
15         cout<<"a="<<a<<"b="<<b;
16     }
17     complex operator-()
18     {
19         complex temp;
20         temp.a=-a;
21         temp.b=-b;
22         return(temp);
23     }
24 };
25
26 main()
27 {
28     complex c1,c2,c3;
29     c1.getdata(3,7);
30     c2=-c1;
31
32     c2.showdata();
33 }
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\19.exe"
a=-3b=-7
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```

Starthere 20.cpp
1  /*Virtual Base Classes*/
2  #include<iostream>
3  using namespace std;
4
5  class student
6  {
7      public:
8      int rollnumber;
9      void getdata(int x)
10     {
11         rollnumber=x;
12     }
13     void putdata()
14     {
15         cout<<"Roll Number"<<rollnumber;
16     }
17 };
18 class test:virtual public student
19 {
20     public:
21     int p,q;
22     void getmarks(int m,int n)
23     {
24         p=m;
25         q=n;
26     }
27     void showmarks()
28     {
29         cout<<"Marks in subject 1="<<p<<"and in subject 2 ="<<q;
30     }
31 };
32
33 class sports:virtual public student
34 {
35     public:
36     int w;
37     void dange(int h)
38     {
39         w=h;
40     }
41     void putscore()
42     {
43         cout<<"Sports="<<w;
44     }
45 };
46
47 class result : public test,public sports
48 {
49     public:
50     int total;
51     void display()
52     {
53         total=p+q+w;
54         cout<<"Hence the total marks are="<<total;
55     }
56 };
57
58 main()
59 {
60     result r1;
61     r1.getdata(45);
62     r1.putdata();
63     r1.getmarks(54,90);
64     r1.showmarks();
65     r1.dange(12);
66     r1.putscore();
67     r1.display();
68 }
69

```

Output :

```

"C:\Users\Hp\Desktop\Arsh programs\20.exe"
Roll Number45Marks in subject 1=54and in subject 2 =90Sports=12Hence the total marks are=156
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.

```

```

Starthere x 28.cpp x 21.cpp x 22.cpp x 23.cpp x 24.cpp x 25.cpp x 26.cpp x 27.cpp x
1  /*Nested Classes*/
2  #include<iostream>
3  #include<string.h>
4  using namespace std;
5
6  class student
7  {
8      public:
9      int rollnumber;
10     char name[20];
11     class address
12     {
13     public:
14     int hno;
15     char street[20];
16     char district[20];
17     char state[20];
18     char pin[20];
19     void getdata(int h,char *s,char *d,char *f,char *g)
20     {
21         cout<<"Enter HnO,Street,District,State,Pin";
22         hno=h;
23         strcpy(street,s);
24         strcpy(district,d);
25         strcpy(state,f);
26         strcpy(pin,g);
27     }
28     void showaddress()
29     {
30
31         cout<<"The Hno="<<hno<<" "<<"Street Name : "<<" "<<street<<" District = "<<district<<"State="<<state<<"Pin="<<pin;
32     }
33     };
34     address Add;
35
36     void setrollnumber(int q)
37     {
38         rollnumber=q;
39     }
40     void setname(char *u)
41     {
42         strcpy(name,u);
43     }
44     void setaddress(int h,char *s,char *d,char *f,char *g)
45     {
46         Add.getdata(h,s,d,f,g);
47     }
48     void showdata()
49     {
50         cout<<"The data of the student is";
51         cout<<rollnumber<<" ";
52         cout<<name<<" ";
53         Add.showaddress();
54     }
55     };
56
57     main()
58     {
59         student s1;
60         s1.setrollnumber(15);
61
62         s1.setname("Arsh Goyal");
63         s1.setaddress(301,"Dogar Basti","Fraidkot","Punjab","151203");
64         s1.showdata();
65     }

```

C:\Users\Hp\Desktop\Arsh programs\21.exe
 Enter HnO,Street,District,State,PinThe data of the student is15 Arsh Goyal The Hno=301 Street Name : Dogar Basti Dist
 rict =FraidkotState=PunjabPin=151203
 Process returned 0 (0x0) execution time : 0.031 s
 Press any key to continue.

```
Starthere  X  28.cpp  X  22.cpp  X  23.cpp  X  24.cpp  X  25.cpp  X  26.cpp  X  27.cpp  X
1  /*Use Of Default Constructor*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7  public:
8      complex()
9      {
10         cout<<"I have called a Constructor";
11     }
12 }
13 };
14
15 main()
16 {
17     complex c1,c2,c3;
18 }
19
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\22.exe"
I have called a ConstructorI have called a ConstructorI have called a Constructor
Process returned 0 (0x0)   execution time : 0.016 s
Press any key to continue.
```

```
Start here X 28.cpp X 23.cpp X 24.cpp X 25.cpp X 26.cpp X 27.cpp X
1  /*Constructor Overloading*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      int a,b,c;
8  public:
9      complex()
10     {
11
12     }
13     complex(int x,int y)
14     {
15         a=x;
16         b=y;
17         cout<<"a="<<a<<"b="<<b;
18     }
19     complex(int x,int y,int z)
20     {
21         a=x;
22         b=y;
23         c=z;
24         cout<<"a="<<a<<"b="<<b<<"c="<<c;
25     }
26
27 };
28
29 main()
30 {
31     complex c1;
32     complex c2(32,87);
33     complex c3(32,66,43);
34 }
35
```

Output :

```
"C:\Users\Hp\Desktop\Arsh programs\23.exe"
a=32b=87a=32b=66c=43
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```



```
Start here x 28.cpp x 24.cpp x 25.cpp x 26.cpp x 27.cpp x
1  /*Use of This pointer*/
2  #include<iostream>
3  using namespace std;
4
5  class box
6  {
7      int a,b,c;
8  public:
9      void setdimension(int a,int b,int c)
10     {
11         this->a=a;
12         this->b=b;
13         this->c=c;
14     }
15     void showdata()
16     {
17         cout<<"Length="<<a<<"Breadth="<<b<<"Height="<<c;
18     }
19 };
20 main()
21 {
22     box smallbox;
23     smallbox.setdimension(2,3,5);
24     smallbox.showdata();
25 }
26
```

Output :

"C:\Users\Hp\Desktop\Arsh programs\24.exe"
Length=2Breadth=3Height=5
Process returned 0 (0x0) execution time : 0.047 s
Press any key to continue.

```
Start here X 28.cpp X 25.cpp X 26.cpp X 27.cpp X
1  /*Friend Function*/
2  #include<iostream>
3  using namespace std;
4
5  class complex
6  {
7      public:
8      int a,b;
9      void getdata(int x,int y)
10     {
11         a=x;
12         b=y;
13     }
14     void display()
15     {
16         cout<<"a="<<a<<"b="<<b;
17     }
18     friend void fun();
19 };
20
21 int fun(complex c)
22 {
23     cout<<"The totsl is"<<c.a+c.b;
24 }
25
26 int main()
27 {
28     complex c1;
29     c1.getdata(23,56);
30     c1.display();
31
32     fun(c1);
33 }
```

```
"C:\Users\Hp\Desktop\Arsh programs\25.exe"
a=23b=56The totsl is79
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here  X  28.cpp  X  27.cpp  X  26.cpp  X
1  /*Dynamic Initialization Of Objects*/
2  #include <iostream>
3  using namespace std;
4  class Employee
5  {
6  int Empl_no;
7  float salary;
8  public:
9  Employee()
10 { }
11 Employee(int empno, float s)
12 {
13     Empl_no=empno;
14     salary=s;
15 }
16 Employee (Employee &emp)
17 {
18     cout<<"\ncopy constructor working\n";
19     Empl_no=emp.Empl_no;
20     salary=emp.salary;
21 }
22 void display (void)
23 {
24     cout<<"\nEmp.No:"<<Empl_no<<"salary:"<<salary;
25 }
26 };
27 int main()
28 {
29     int eno;
30     float sal;
31
32     cout<<"Enter the employee number and salary\n";
33     cin>>eno>>sal;
34     Employee obj1(eno,sal);
35     cout<<"\nEnter the employee number and salary\n";
36     cin>>eno>>sal;
37     Employee obj2(eno,sal);
38     obj1.display();
39     Employee obj3=obj2;
40     obj3.display();
41 }
42
```

```
"C:\Users\Hp\Desktop\Arsh programs\26.exe"
Enter the employee number and salary
12
1200

Enter the employee number and salary
12
1245

Emp.No:12salary:1200
copy constructor working

Emp.No:12salary:1245
Process returned 0 (0x0)   execution time : 8.709 s
Press any key to continue.
```

```
Start here X 28.cpp X 27.cpp X
1  /*Area Of Rectangle*/
2  #include <iostream>
3  using namespace std;
4
5  class Rectangle {
6      int width, height;
7  public:
8      void set_values (int,int);
9      int area() {return width*height;}
10 };
11
12 void Rectangle::set_values (int x, int y) {
13     width = x;
14     height = y;
15 }
16
17 int main () {
18     Rectangle rect;
19     rect.set_values (3,4);
20     cout << "area: " << rect.area();
21     return 0;
22 }
23
```

"C:\Users\Hp\Desktop\Arsh programs\27.exe"

```
area: 12
Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```

```
Start here x 28.cpp x
1  /*Public Data Memebers*/
2  #include <iostream>
3  using namespace std;
4
5  class Numbers
6  {
7      public:
8          int a;
9          int b;
10 };
11
12 //Main function
13 int main()
14 {
15
16     Numbers Num;
17     Num.a = 100;
18     Num.b = 200;
19
20     cout<<"Value of Num.a: "<<Num.a<<endl;
21     cout<<"Value of Num.b: "<<Num.b<<endl;
22
23     return 0;
24 }
25
26
```

```
"C:\Users\Hp\Desktop\Arsh programs\28.exe"
Value of Num.a: 100
Value of Num.b: 200

Process returned 0 (0x0)   execution time : 0.031 s
Press any key to continue.
```