

ch.varshitha
192110531

1. Write the c++ program for sum of two numbers using class and object and use getdata and putdata as member function?

PROGRAM:

The screenshot shows a C++ IDE with two windows. The left window, titled 'sum in class and object.cpp', contains the following code:

```

1 using namespace std;
2 #include<iostream>
3 class sum
4 {
5     int x,y,c;
6     public:
7     void getdata();
8     void putdata();
9 };
10 void sum::getdata()
11 {
12     cout<<"enter the values of x and y: ";
13     cin>>x>>y;
14 }
15 void sum::putdata()
16 {
17     cout<<"sum=";
18     c=x+y;
19     cout<<c;
20 }
21 main()
22 {
23     sum z;
24     z.getdata();
25     z.putdata();
26 }
    
```

The right window, titled 'C:\Users\Del\Documents\sum in class and object.exe', shows the program's execution output:

```

enter the values of x and y: 4
5
sum=9
-----
Process exited after 2.812 seconds with return value 0
Press any key to continue . . .
    
```

The bottom of the IDE shows the 'Compilation results...' window with the following information:

```

Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Del\Documents\sum in class and object.exe
- Output Size: 2.98865604400635 MiB
- Compilation Time: 2.39s
    
```

2. Write the c++ program to find the biggest of three numbers using class and object?

PROGRAM:

The screenshot shows a C++ IDE with two windows. The left window, titled 'greatest in class and object.cpp', contains the following code:

```

1 using namespace std;
2 #include<iostream>
3 class greatest
4 {
5     int x,y,z;
6     public:
7     void getdata();
8     void putdata();
9 };
10 void greatest::getdata()
11 {
12     cout<<"enter the values of x,y and z: ";
13     cin>>x>>y>>z;
14 }
15 void greatest::putdata()
16 {
17     if(x>y && x>z)
18     {
19         cout<<"x is greatest";
20     }
21     else if(y>z && y>x)
22     {
23         cout<<"y is greatest";
24     }
25     else if(z>x && z>y)
26     {
27         cout<<"z is greatest";
28     }
29     else
30     {
31         cout<<"enter the correct values";
32     }
33 }
34 main()
35 {
36     greatest a;
37     a.getdata();
38     a.putdata();
39 }
    
```

The right window, titled 'greatest in class and object.exe', shows the program's execution output:

```

enter the values of x,y and z: 4
5
6
z is greatest
-----
Process exited after 2.654 seconds with return value 0
Press any key to continue . . .
    
```

The bottom of the IDE shows the 'Compilation results...' window with the following information:

```

Compilation results...
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Del\Documents\greatest in class and object.exe
- Output Size: 2.98865604400635 MiB
- Compilation Time: 2.39s
    
```

ch.varshitha
192110531

3. Write the c++ program to print the student report using class and object?

PROGRAM:

The screenshot shows a C++ IDE with two windows. The left window, titled 'sum in class and object.cpp', contains the following code:

```

1  using namespace std;
2  #include <iostream>
3  class student
4  {
5  public:
6      int m1,m2,m3,regno,tot,avg;
7      void getdata();
8      void putdata();
9  };
10 void student::getdata()
11 {
12     cout<<"enter the regno:"<<endl;
13     cin>>regno;
14     cout<<"enter the marks:"<<endl;
15     cin>>m1>>m2>>m3;
16 }
17 void student::putdata()
18 {
19     tot=m1+m2+m3;
20     avg=tot/3;
21     if(m1>10 && m2>100 && m2>70 && m2<100 && m3>10 && m3<100)
22     {
23         if(avg>90)
24             cout<<"Grade A";
25         else if(avg>80 && avg<90)
26             cout<<"Grade B";
27         else if(avg>70 && avg<80)
28             cout<<"Grade C";
29         else if(avg>60 && avg<70)
30             cout<<"Grade D";
31         else if(avg>50 && avg<60)
32             cout<<"Grade E";
33         else
34             cout<<"Fail";
35     }
36     cout<<"enter the correct value:"<<endl;
37 }
38 int main()
39 {
40     student s;
41     s.getdata();
42     s.putdata();
43     return 0;
44 }

```

The right window, titled 'C:\Users\Del1\Documents\student marks in c and o.exe', shows the program's execution:

```

enter the regno 45
enter the marks 78
67
89
Grade C
-----
Process exited after 9.303 seconds with return value 0
Press any key to continue . . .

```

At the bottom, the 'Compilation results...' window shows:

```

-----
Errors: 0
Warnings: 0
Output Filename: C:\Users\Del1\Documents\student marks in c and o.exe
Output Size: 2.98915672302246 MiB
Compilation Time: 1.70s

```

4. Write the c++ program for arithmetic operations using switch case statement?

PROGRAM:

The screenshot shows a C++ IDE with two windows. The left window, titled 'sum in class and object.cpp', contains the following code:

```

1  using namespace std;
2  #include <iostream>
3  class arithmetic
4  {
5  public:
6      float a,b;
7      void getdata();
8      void putdata();
9  };
10 void arithmetic::getdata()
11 {
12     cout<<"enter the values of a and b:"<<endl;
13     cin>>a>>b;
14     cout<<"enter the choice:"<<endl;
15     cin>>cho;
16 }
17 void arithmetic::putdata()
18 {
19     switch(cho)
20     {
21         case 1:
22             cout<<a+b<<endl;
23             break;
24         case 2:
25             cout<<a-b<<endl;
26             break;
27         case 3:
28             cout<<a*b<<endl;
29             break;
30         case 4:
31             cout<<a/b<<endl;
32             break;
33         default:
34             cout<<"enter the correct choice:"<<endl;
35     }
36 }
37 int main()
38 {
39     arithmetic a;
40     a.getdata();
41     a.putdata();
42     return 0;
43 }

```

The right window, titled 'C:\Users\Del1\Documents\arithmetic in c and o.exe', shows the program's execution:

```

enter the values of a and b: 5
enter the choice 3
0
-----
Process exited after 5.889 seconds with return value 0
Press any key to continue . . .

```

At the bottom, the 'Compilation results...' window shows:

```

-----
Errors: 0
Warnings: 0
Output Filename: C:\Users\Del1\Documents\arithmetic in c and o.exe
Output Size: 2.9891630409131 MiB
Compilation Time: 1.70s

```


ch.varshitha
192110531

5. Write the c++ program for sum of two numbers using function overloading?

PROGRAM:

The screenshot shows the Embarcadero Dev-C++ 6.3 IDE. The source code file is 'sum in class and object.cpp' and the executable is 'C:\Users\Del\Documents\function overloading.exe'. The code defines two overloaded functions: `sum(int a, int b)` and `sum(double d, int e)`. The `main` function calls `sum(1,2)` and `sum(1.0,2)`. The output window shows the program running successfully, exiting after 0.101 seconds with a return value of 0.

```

1 using namespace std;
2 #include<iostream>
3 void sum(int a,int b)
4 {
5     int c=a+b;
6     cout<<c;
7 }
8 void sum(double d,int e)
9 {
10    int f=d+e;
11    cout<<f;
12 }
13 int main()
14 {
15     sum(1,2);
16     sum(1.0,2);
17     return 0;
18 }
    
```

Process exited after 0.101 seconds with return value 0
Press any key to continue . . .

6. Write the c++ program for swapping of two numbers using call by value and call by reference?

PROGRAM:

The screenshot shows the Embarcadero Dev-C++ 6.3 IDE. The source code file is 'arithmetic in c and o.cpp' and the executable is 'C:\Users\Del\Documents\swap of numbers.exe'. The code defines a `swap` function that takes two integer references and swaps their values. The `main` function prompts the user to enter two values, reads them, and calls `swap(x,y)`. The output window shows the program running successfully, exiting after 1.752 seconds with a return value of 0.

```

1 using namespace std;
2 #include<iostream>
3 int swap(int *x,int *y)
4 {
5     int *temp;
6     temp=*x;
7     *x=*y;
8     *y=*temp;
9     cout<<*x<<"\n"<<*y;
10    return 0;
11 }
12 int main()
13 {
14     int x,y;
15     cout<<"enter x,y values";
16     cin>>x>>y;
17     swap(&x,&y);
18     return 0;
19 }
    
```

enter x,y values
4
4
5

Process exited after 1.752 seconds with return value 0
Press any key to continue . . .