

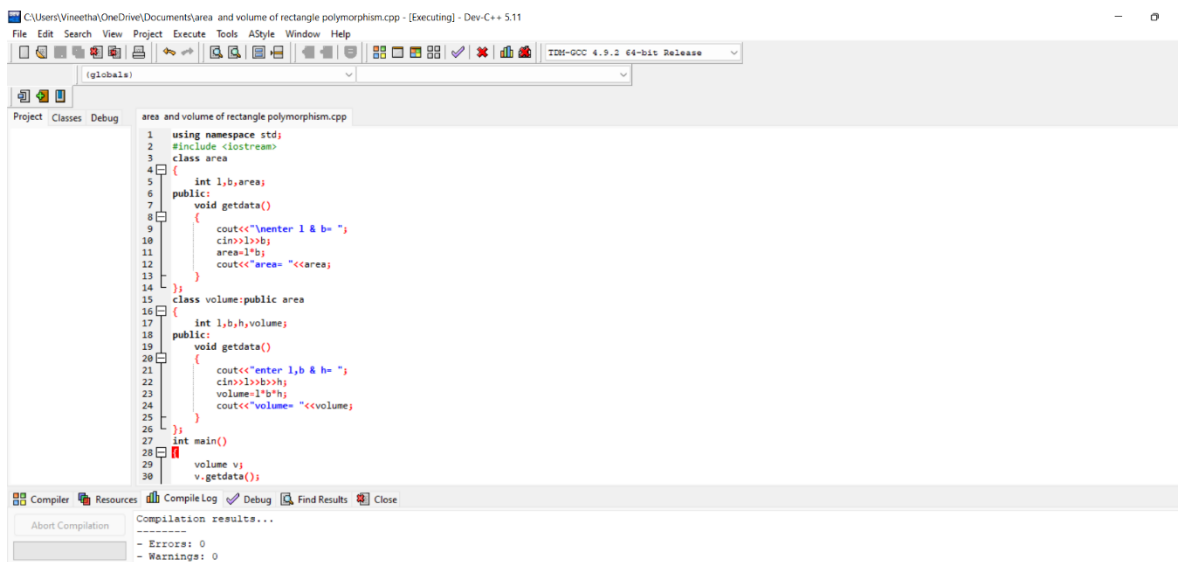
# DSA0136-OBJECT ORIENTED PROGRAMMING WITH C++

DATE:30-09-2022

NAME:B.VINEETHA

REG.NO:192110487

**1.WRITE A C++ PROGRAM FOR CALCULATE THE AREA OF THE RECTANGLE AND VOLUME OF THE RECTANGLE.CREATE A CLASS AREA AND DERIVE THE CLASS VOLUME AND USE THE SAME MEMBER FUNCTION WITH THE SAME PARAMETER FOR THE ABOVE CLASSES.**

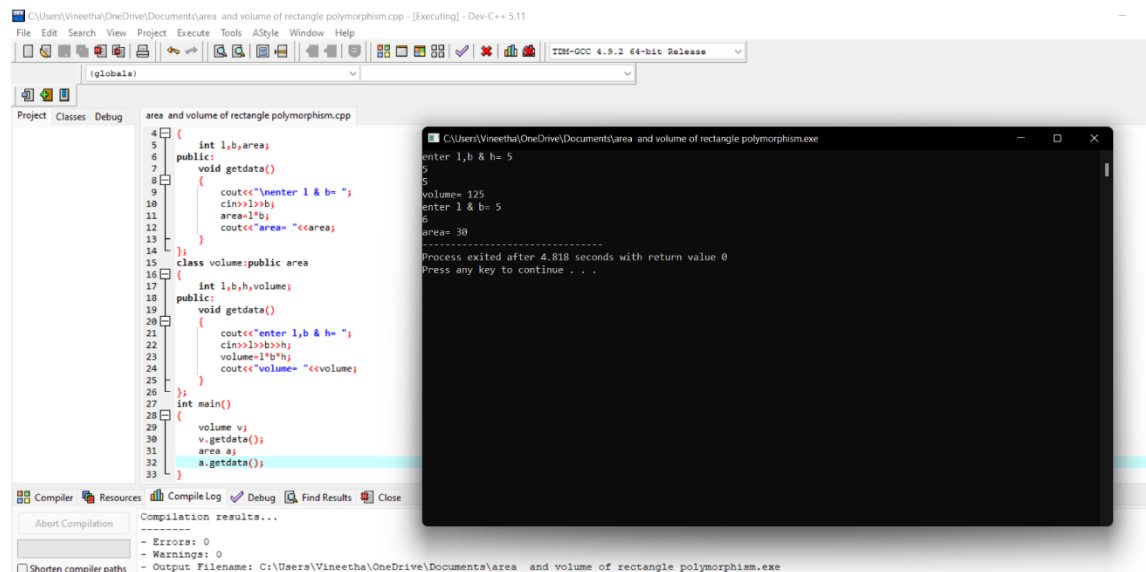


```
1 using namespace std;
2 #include <iostream>
3 class area
4 {
5     int l,b,area;
6 public:
7     void getdata()
8     {
9         cout<<"\nEnter l & b= ";
10        cin>>l>>b;
11        area=l*b;
12        cout<<"area= "<<area;
13    }
14 };
15 class volume:public area
16 {
17     int l,b,h,volume;
18 public:
19     void getdata()
20     {
21         cout<<"Enter l,b & h= ";
22         cin>>l>>b>>h;
23         volume=l*b*h;
24         cout<<"volume= "<<volume;
25     }
26 };
27 int main()
28 {
29     volume v;
30     v.getdata();
31 }
```

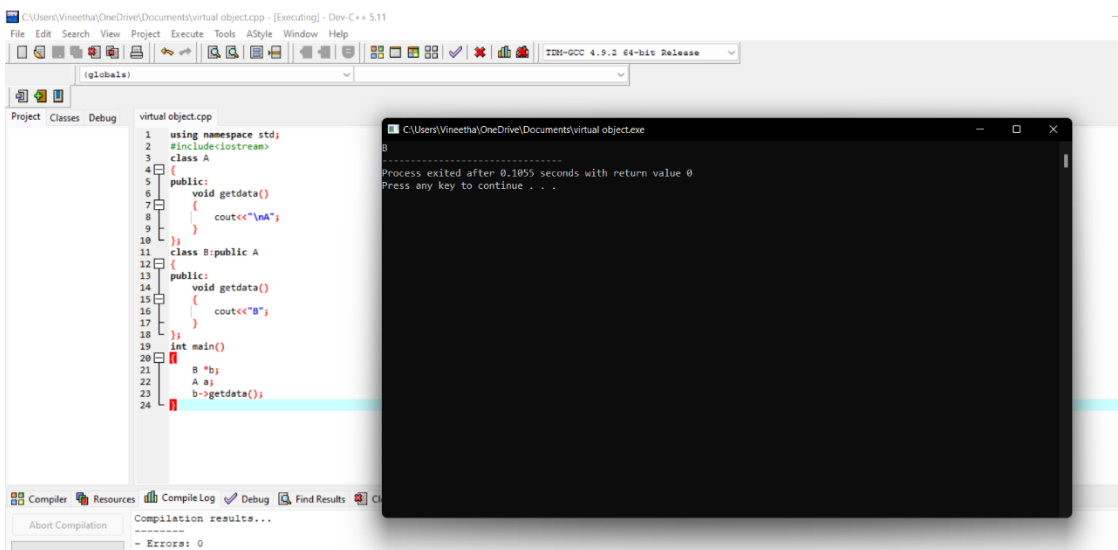
Compilation results...

- Errors: 0

- Warnings: 0



## 2.WRITE A C++ PROGRAM TO DISPLAY AN OBJECT USING POLYMORPHISM



## 3.WRITE DOWN A CODE FOR THE FOLLOWING INHERITANCE

**BANK**

**SBI**

**ICICI**

**AXIS**

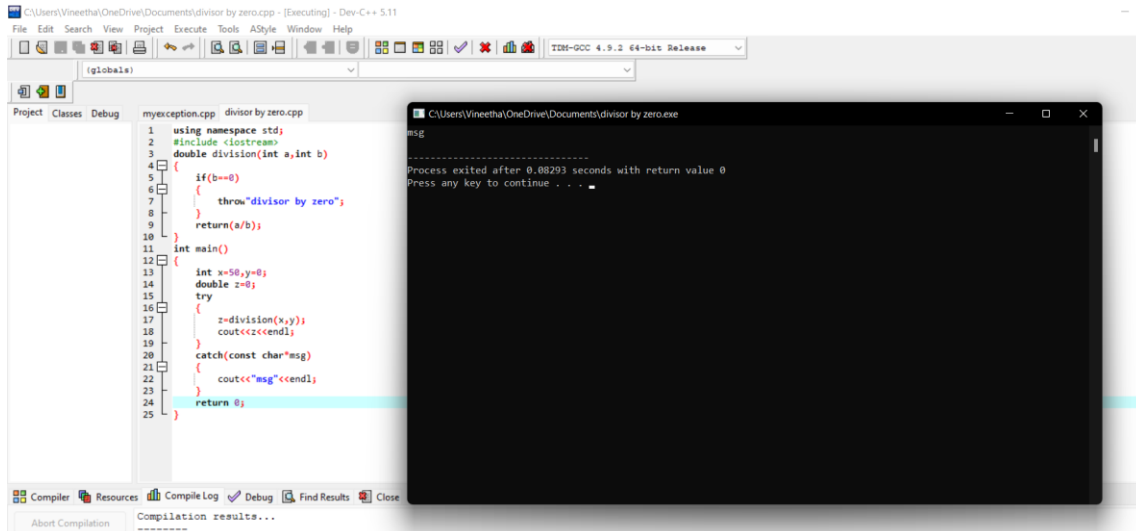
```
C:\Users\Vineetha\OneDrive\Documents\bank.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug bank.cpp
1 using namespace std;
2 #include <iostream>
3 class bank
4 {
5 public:
6 float p,t,r,s;
7 void getdata()
8 {
9 cout<<"enter principle: ";
10 cin>>p;
11 cout<<"enter rate: ";
12 cin>>r;
13 cout<<"enter time: ";
14 cin>>t;
15 cout<<"simple interest: ";
16 s=(p*r*t)/100;
17 cout<<s;
18 }
19 };
20 class sbi:public bank
21 {
22 public:
23 float p,t,r,s;
24 void getdata()
25 {
26 cout<<"enter principle: ";
27 cin>>p;
28 cout<<"enter rate: ";
29 cin>>r;
30 cout<<"enter time: ";
```

```
C:\Users\Vineetha\OneDrive\Documents\bank.cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug bank.cpp
34 }
35 }
36 };
37 class icici:public bank
38 {
39 public:
40 float p,t,r,s;
41 void getdata()
42 {
43 cout<<"enter principle: ";
44 cin>>p;
45 cout<<"enter rate: ";
46 cin>>r;
47 cout<<"enter time: ";
48 cin>>t;
49 cout<<"simple interest of icici: ";
50 s=(p*r*t)/100;
51 cout<<s;
52 }
53 };
54 class axis:public bank
55 {
56 public:
57 float p,t,r,s;
58 void getdata()
59 {
60 cout<<"enter principle: ";
61 cin>>p;
62 cout<<"enter rates: ";
63 cin>>r;
```

```
C:\Users\Vineetha\OneDrive\Documents\bank.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug bank.cpp
56 public:
57 float p,t,r,s;
58 void getdata()
59 {
60 cout<<"enter principle: ";
61 cin>>p;
62 cout<<"enter rate: ";
63 cin>>r;
64 cout<<"enter time: ";
65 cin>>t;
66 cout<<"simple interest of axis: ";
67 s=(p*r*t)/100;
68 cout<<s;
69 }
70 };
71 main()
72 {
73 bank i;
74 i.getdata();
75 sbi j;
76 j.getdata();
77 icici k;
78 k.getdata();
79 axis u;
80 u.getdata();
81 }
82
83
84
85
```

```
C:\Users\Vineetha\OneDrive\Documents\bank.exe
enter principle: 4500
enter rate: 5
enter time: 5
simple interest: 1125
enter principle: 8600
enter rate: 4
enter time: 5
simple interest of sbi: 1720
enter principle: 6500
enter rate: 4
enter time: 6
simple interest of icici: 1560
enter principle: 8900
enter rate: 4
enter time: 6
simple interest of axis: 2136
.....
Process exited after 16.76 seconds with return value 0
Press any key to continue . . .
```

#### 4. WRITE A C++ PROGRAM FOR DIVISOR BY ZERO



#### 5. WRITE A C++ PROGRAM FOR MYEXCEPTIONS

