

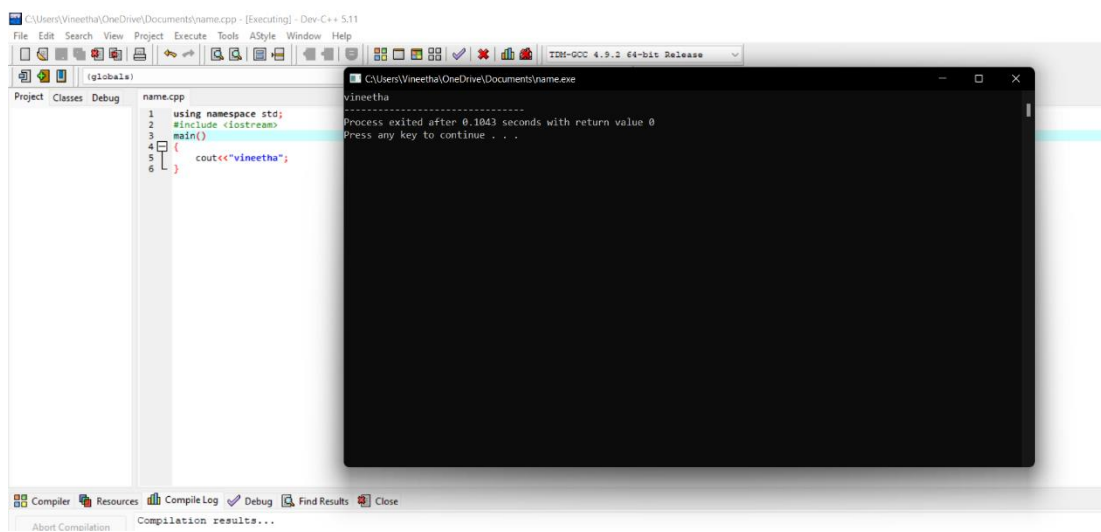
DSA0136-OBJECT ORIENTED PROGRAMMING USING C++

DATE:26-09-2022

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REG.NO:192110487

1.WRITE A C++ PROGRAM TO DISPLAY NAME

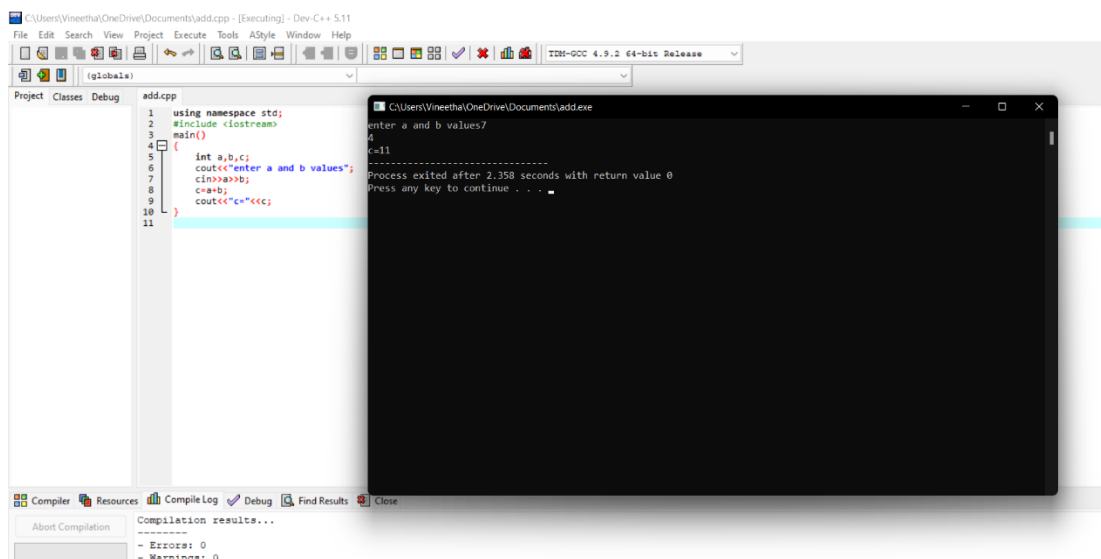


The screenshot shows a C++ IDE with a file named `name.cpp` and its corresponding executable `name.exe`. The code in `name.cpp` is as follows:

```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     cout<<"vineetha";
6 }
```

The output window shows the execution of `name.exe`, displaying the name "vineetha" and a message indicating the process exited after 0.1043 seconds with a return value of 0.

2.WRITE A C++ PROGRAM TO ADD TWO NUMBERS



The screenshot shows a C++ IDE with a file named `add.cpp` and its corresponding executable `add.exe`. The code in `add.cpp` is as follows:

```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     int a,b,c;
6     cout<<"enter a and b values";
7     cin>>a>>b;
8     c=a+b;
9     cout<<"c="<<c;
10 }
11
```

The output window shows the execution of `add.exe`, displaying the prompt "enter a and b values?", the input "4 -11", and the result "c=-11". The process exited after 2.358 seconds with a return value of 0.

3. WRITE A C++ PROGRAM TO SUBTRACT TWO NUMBERS

The screenshot shows a C++ IDE with a file named `subtract.cpp` open. The code is as follows:

```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     int a,b,c;
6     cout<<"enter a and b values";
7     cin>>a>>b;
8     c=a-b;
9     cout<<"c="<<c;
10 }
11
```

The IDE's output window shows the execution of the program. It prompts the user to enter values for `a` and `b`. The user enters `5` for `a` and `3` for `b`. The program calculates `c = 5 - 3 = 2` and displays the result. The output window also shows the process exit time and a prompt to press any key to continue.

```
C:\Users\Vineetha\OneDrive\Documents\subtract.exe
enter a and b values
5
3
c=2
-----
Process exited after 2.259 seconds with return value 0
Press any key to continue . . .
```

The bottom status bar of the IDE shows "Compilation results..." with 0 errors and 0 warnings.

4. WRITE A C++ PROGRAM TO MULTIPLY TWO NUMBERS

The screenshot shows a C++ IDE with a file named `multiply.cpp` open. The code is as follows:

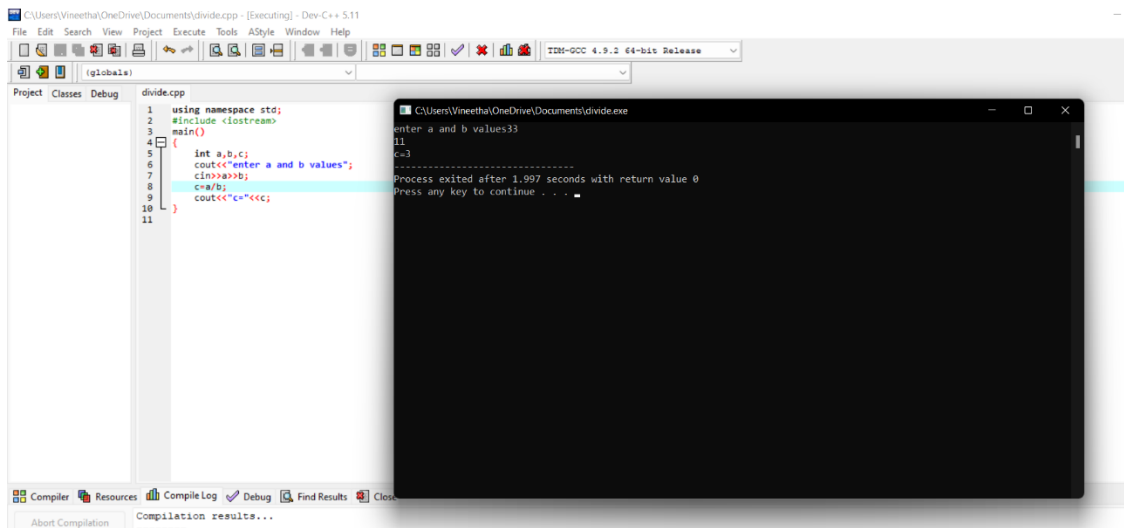
```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     int a,b,c;
6     cout<<"enter a and b values";
7     cin>>a>>b;
8     c=a*b;
9     cout<<"c="<<c;
10 }
11
```

The IDE's output window shows the execution of the program. It prompts the user to enter values for `a` and `b`. The user enters `5` for `a` and `25` for `b`. The program calculates `c = 5 * 25 = 125` and displays the result. The output window also shows the process exit time and a prompt to press any key to continue.

```
C:\Users\Vineetha\OneDrive\Documents\multiply.exe
enter a and b values
5
25
c=125
-----
Process exited after 2.326 seconds with return value 0
Press any key to continue . . .
```

The bottom status bar of the IDE shows "Compilation results..." with 0 errors and 0 warnings. The output filename is `C:\Users\Vineetha\OneDrive\Documents\multiply.exe`.

5. WRITE A C++ PROGRAM TO DIVIDE TWO NUMBERS



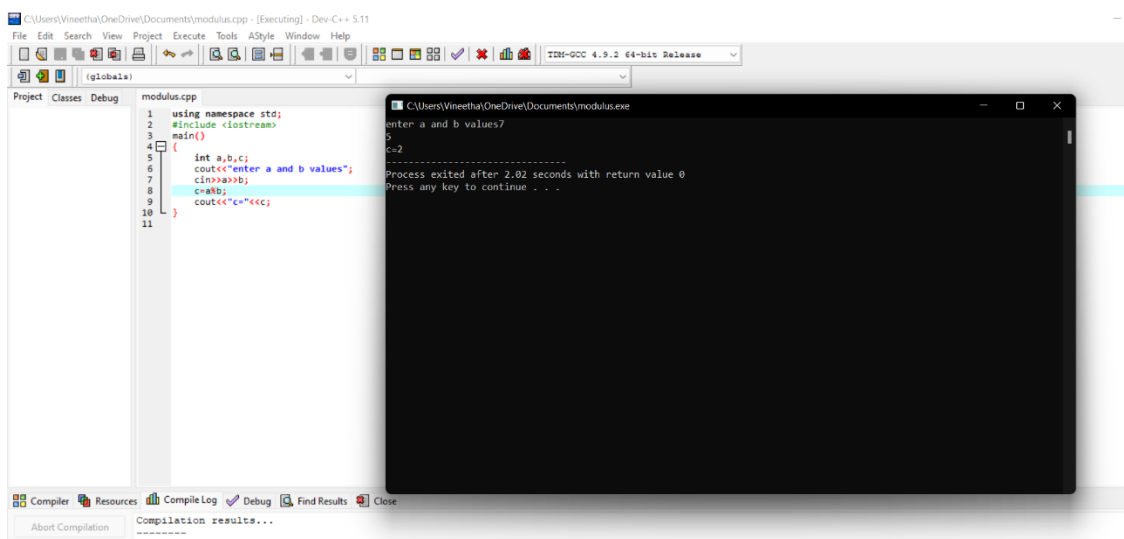
The screenshot shows the Dev-C++ IDE with a project named 'divide.cpp'. The code is as follows:

```
1 using namespace std;
2 #include <iostream>
3
4 int main()
5 {
6     int a,b,c;
7     cout<<"enter a and b values";
8     cin>>a>>b;
9     c=a/b;
10    cout<<"c="<<c;
11 }
```

The execution window shows the following output:

```
enter a and b values33
11
c=3
-----
Process exited after 1.997 seconds with return value 0
Press any key to continue . . .
```

6. WRITE A C++ PROGRAM TO FIND MODULUS OF TWO NUMBERS



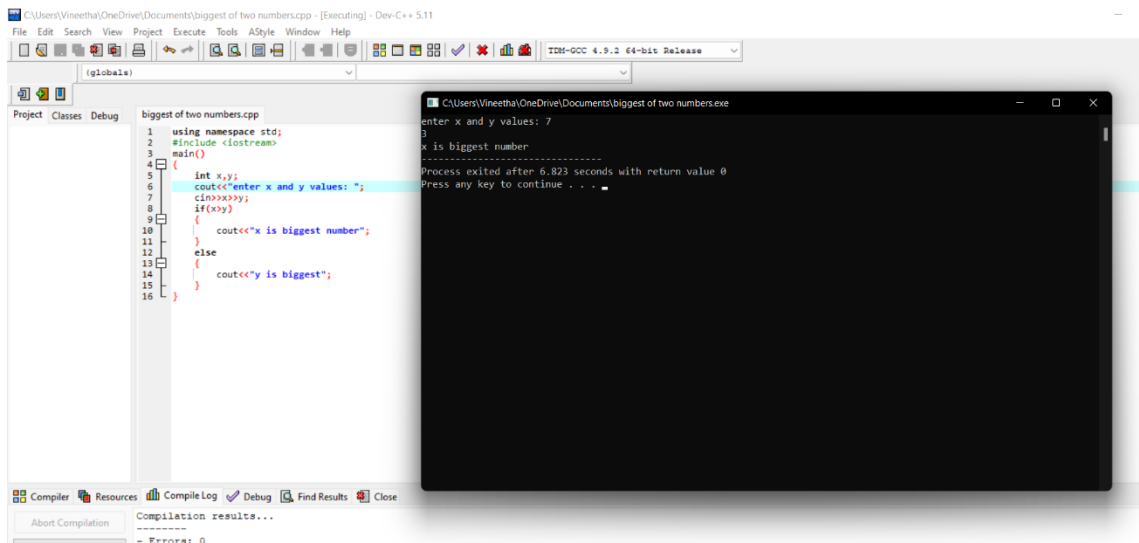
The screenshot shows the Dev-C++ IDE with a project named 'modulus.cpp'. The code is as follows:

```
1 using namespace std;
2 #include <iostream>
3
4 int main()
5 {
6     int a,b,c;
7     cout<<"enter a and b values";
8     cin>>a>>b;
9     c=a%b;
10    cout<<"c="<<c;
11 }
```

The execution window shows the following output:

```
enter a and b values7
5
c=2
-----
Process exited after 2.02 seconds with return value 0
Press any key to continue . . .
```

7. WRITE A C++ PROGRAM TO FIND THE BIGGEST OF TWO NUMBERS



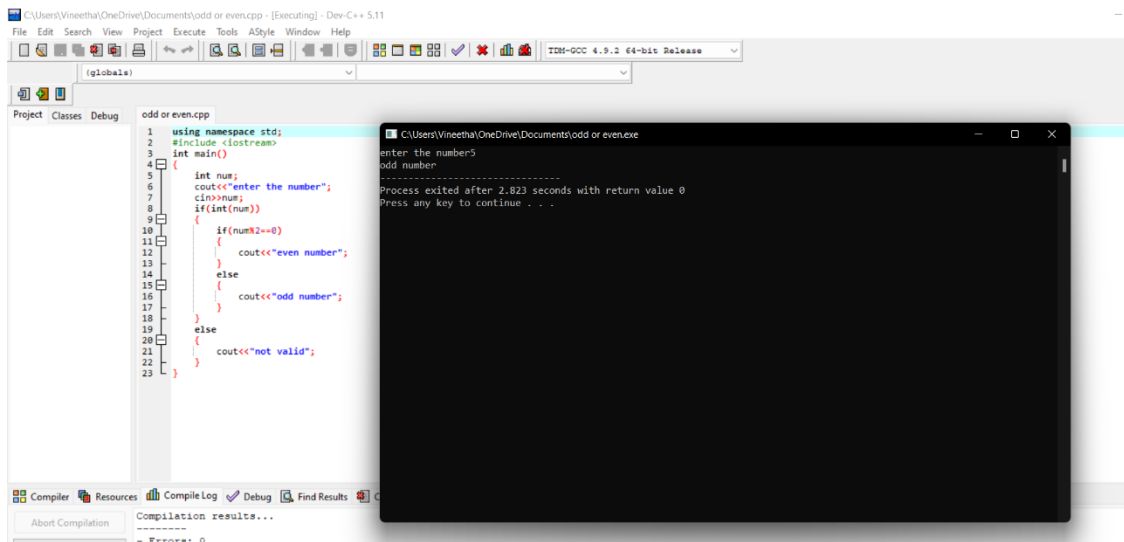
The screenshot shows a C++ IDE with the file `biggest of two numbers.cpp` open. The code is as follows:

```
1 using namespace std;
2 #include <iostream>
3 int main()
4 {
5     int x,y;
6     cout<<"enter x and y values: ";
7     cin>>x>>y;
8     if(x>y)
9     {
10        cout<<"x is biggest number";
11    }
12    else
13    {
14        cout<<"y is biggest";
15    }
16 }
```

The execution window shows the following output:

```
enter x and y values: 7
3
x is biggest number
-----
Process exited after 6.823 seconds with return value 0
Press any key to continue . . .
```

8. WRITE A C++ PROGRAM TO FIND THE GIVEN NUMBER IS EVEN OR ODD



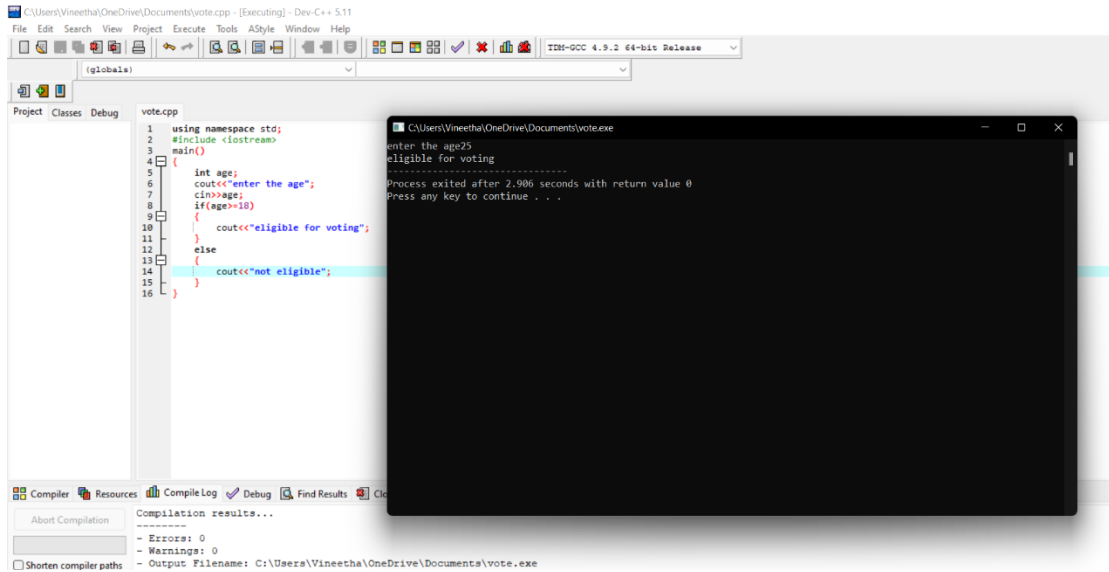
The screenshot shows a C++ IDE with the file `odd or even.cpp` open. The code is as follows:

```
1 using namespace std;
2 #include <iostream>
3 int main()
4 {
5     int num;
6     cout<<"enter the number";
7     cin>>num;
8     if(int(num))
9     {
10        if(num%2==0)
11        {
12            cout<<"even number";
13        }
14        else
15        {
16            cout<<"odd number";
17        }
18    }
19    else
20    {
21        cout<<"not valid";
22    }
23 }
```

The execution window shows the following output:

```
enter the number5
odd number
-----
Process exited after 2.823 seconds with return value 0
Press any key to continue . . .
```

9. WRITE A C++ PROGRAM TO FIND THE GIVEN PERSON IS ELIGIBLE FOR VOTE OR NOT



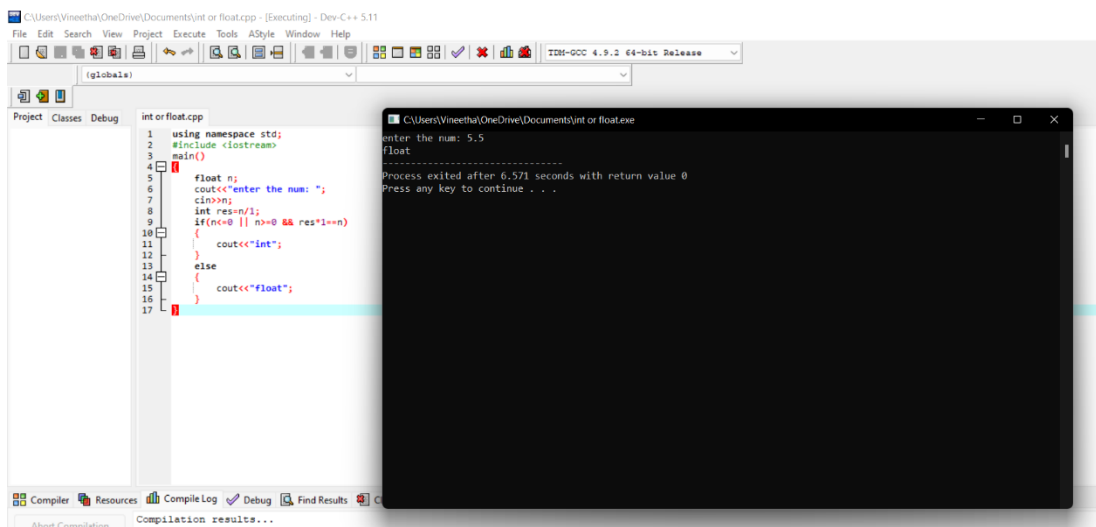
```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     int age;
6     cout<<"enter the age";
7     cin>>age;
8     if(age>=18)
9     {
10        cout<<"eligible for voting";
11    }
12    else
13    {
14        cout<<"not eligible";
15    }
16 }
```

```
enter the age25
eligible for voting
Process exited after 2.906 seconds with return value 0
Press any key to continue . . .
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Vineetha\OneDrive\Documents\vote.exe

10. WRITE A C++ PROGRAM TO FIND THE GIVEN IS FLOAT OR INT



```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     float n;
6     cout<<"enter the num: ";
7     cin>>n;
8     int res=n/1;
9     if(n<=0 || n>=0 && res*1==n)
10    {
11        cout<<"int";
12    }
13    else
14    {
15        cout<<"float";
16    }
17 }
```

```
enter the num: 5.5
float
Process exited after 6.571 seconds with return value 0
Press any key to continue . . .
```

Compilation results...

11. . WRITE A C++ PROGRAM TO PRINT THE STUDENT REPORT TO THE FOLLOWING FIELDS:REG.NO,NAME,MARK1,MARK2,MARK3,TOTAL,AVG

The image shows a screenshot of a C++ program being developed in Dev-C++ and its execution. The source code, located in `student report.cpp`, defines a `main` function that prompts the user to enter a registration number and three marks. It then calculates the total and average, and prints a grade based on the average. The execution window shows the program running with the input registration number 192110487, marks 96, 75, and 85, resulting in a total of 256, an average of 85.33, and a grade of A.

```
1 using namespace std;
2 #include <iostream>
3 main()
4 {
5     int regno,m1,m2,m3,total,avg;
6     cout<<"enter the regno";
7     cin>>regno;
8     cout<<"m1=";
9     cin>>m1;
10    cout<<"m2=";
11    cin>>m2;
12    cout<<"m3=";
13    cin>>m3;
14    total=(m1+m2+m3);
15    avg=total/3;
16    if(avg<=90 && avg>=80)
17    {
18        cout<<"grade A";
19    }
20    else if(avg<=80 && avg>=70)
21    {
22        cout<<"grade B";
23    }
24    else if(avg<=70 && avg>=60)
25    {
26        cout<<"grade C";
27    }
28    else
29    {
30        cout<<"fail";
31    }
32 }
```

Execution Output:

```
enter the regno192110487
m1=96
m2=75
m3=85
total=256
avg=85.33
grade A
Process exited after 12.53 seconds with return value 0
Press any key to continue . . .
```