

Program:-1

```
#include<iostream>

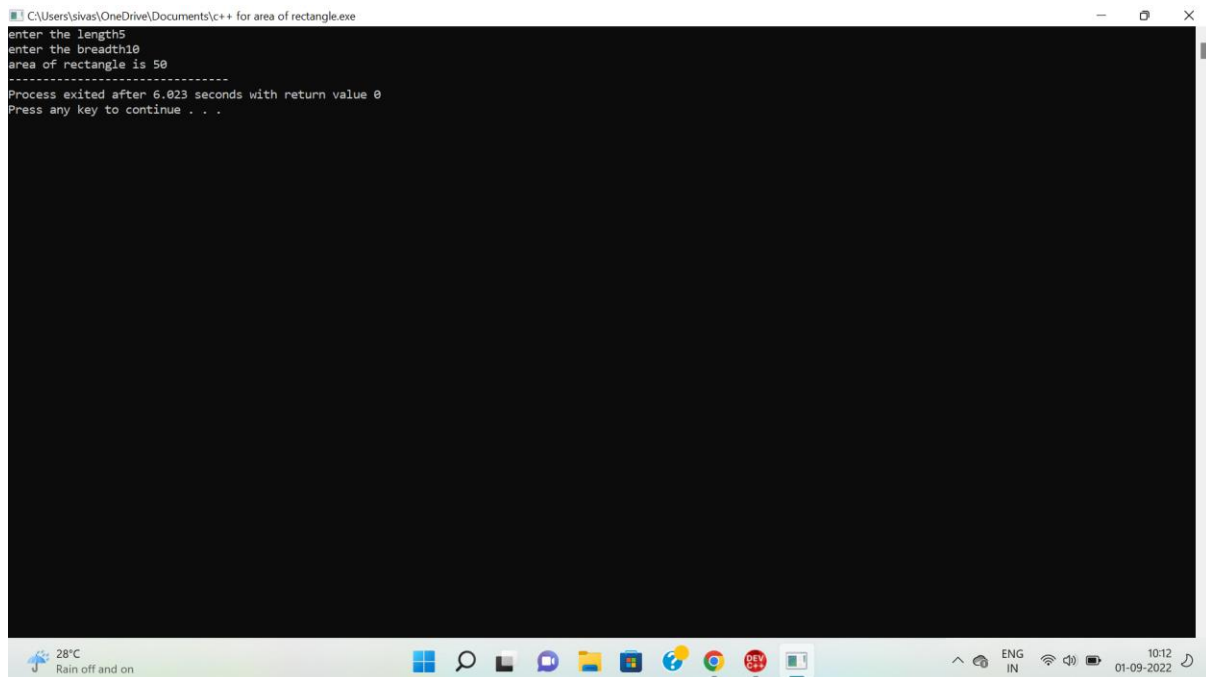
#include<math.h>

using namespace std;

class rectangle
{
    private:
        int r;
    public:
        rectangle(int l,int b)
        {
            r=l*b;
        }
        int display()
        {
            cout<<"area of rectangle is "<<r;
            return 0;
        }
};

int main()
{
    int l,b;
    cout<<"enter the length";
    cin>>l;
    cout<<"enter the breadth";
    cin>>b;
    rectangle r(l,b);
    r.display();
    return 0;
}
```

Output:-



The screenshot shows a Windows command prompt window titled "C:\Users\sivas\OneDrive\Documents\c++ for area of rectangle.exe". The output of the program is as follows:

```
enter the length5
enter the breadth10
area of rectangle is 50
-----
Process exited after 6.023 seconds with return value 0
Press any key to continue . . .
```

The Windows taskbar at the bottom shows the date and time as 10:12 on 01-09-2022, and the system language is set to ENG IN.

Program:-2

```
#include<iostream>

using namespace std;

int main()
{
    int m1,m2,m3,total,avg,reg_no;

    cout<<"enter the reg no";

    cin>>reg_no;

    cout<<"enter the 3 marks";

    cin>>m1>>m2>>m3;

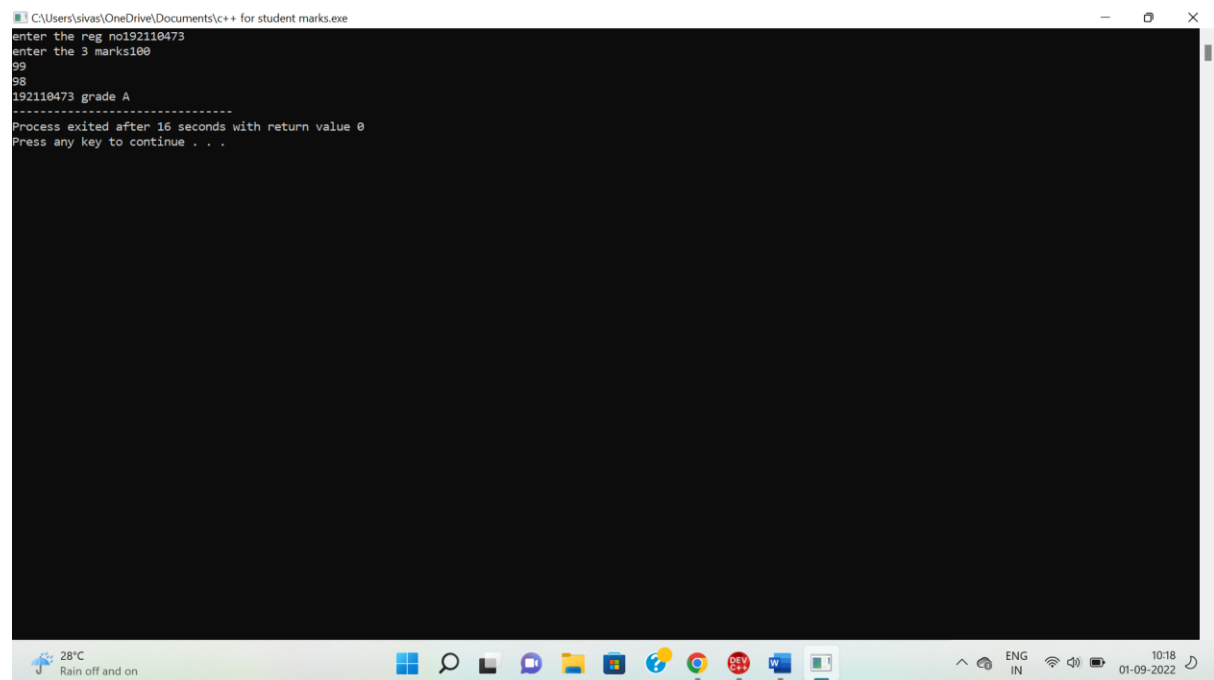
    total=m1+m2+m3;

    avg=total/3;

    if(int(m1)&&int(m2)&&int(m3)&&m1<=100&&m2<=100&&m3<=100)
    {
        if(avg>=90)
        {
            cout<<reg_no<<" grade A";
        }
    }
}
```

```
        else if(avg>=80&&avg<=90)
        {
            cout<<reg_no<<" grade B";
        }
        else if(avg>=70&&avg<=80)
        {
            cout<<reg_no<<" grade C";
        }
        else if(avg>=60&&avg<=70)
        {
            cout<<reg_no<<" grade D";
        }
        else if(avg>=50&&avg<=60)
        {
            cout<<reg_no<<" grade E";
        }
        else
        {
            cout<<reg_no<<" fail";
        }
    }
    else
    {
        cout<<"enter the valid marks";
    }
    return 0;
}
```

Output:-



```
C:\Users\sivas\OneDrive\Documents\c++ for student marks.exe
enter the reg no192110473
enter the 3 marks100
99
98
192110473 grade A
=====
Process exited after 16 seconds with return value 0
Press any key to continue . . .
```

The screenshot shows a Windows desktop environment. At the top, a command prompt window titled "C:\Users\sivas\OneDrive\Documents\c++ for student marks.exe" is open. The window contains the following text: "enter the reg no192110473", "enter the 3 marks100", "99", "98", "192110473 grade A", a line of 15 equals signs, "Process exited after 16 seconds with return value 0", and "Press any key to continue . . .". The Windows taskbar is visible at the bottom, showing the Start button, Search icon, Task View icon, and several application icons including File Explorer, Microsoft Edge, Google Chrome, and Microsoft Word. The system tray on the right shows the date and time as "10:18 01-09-2022" and the language as "ENG IN".