

OOP with C++

Lab work - 06

Lab Date - 22th Feb 2021

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Semester - 6th

GitHub - <https://github.com/rishabh-live/oop-w-cpp-4-sem/tree/main/Labs>

1) Write a program to use constructors, destructor and function overloading

Source Code

```
#include <iostream>

using namespace std;

class calculateArea{
private:
    float area;
    int a, b;

public:
    calculateArea(){
        takeInput();
        area = a*b;
    }
    ~calculateArea(){
        cout << "Destroyed Data" << endl;
    }

    void display(string text){
        cout << text << " " << area << endl;
    }

    void display(){
        cout << " Calculated area for given inputs are : " << area <<
endl;
    }
    void takeInput(){
        cout << "Enter Height : ";
        cin >> a;
```

```
        cout << endl;

        cout << "Enter Width : ";
        cin >> b;
        cout << endl;
    }

};

int main(){

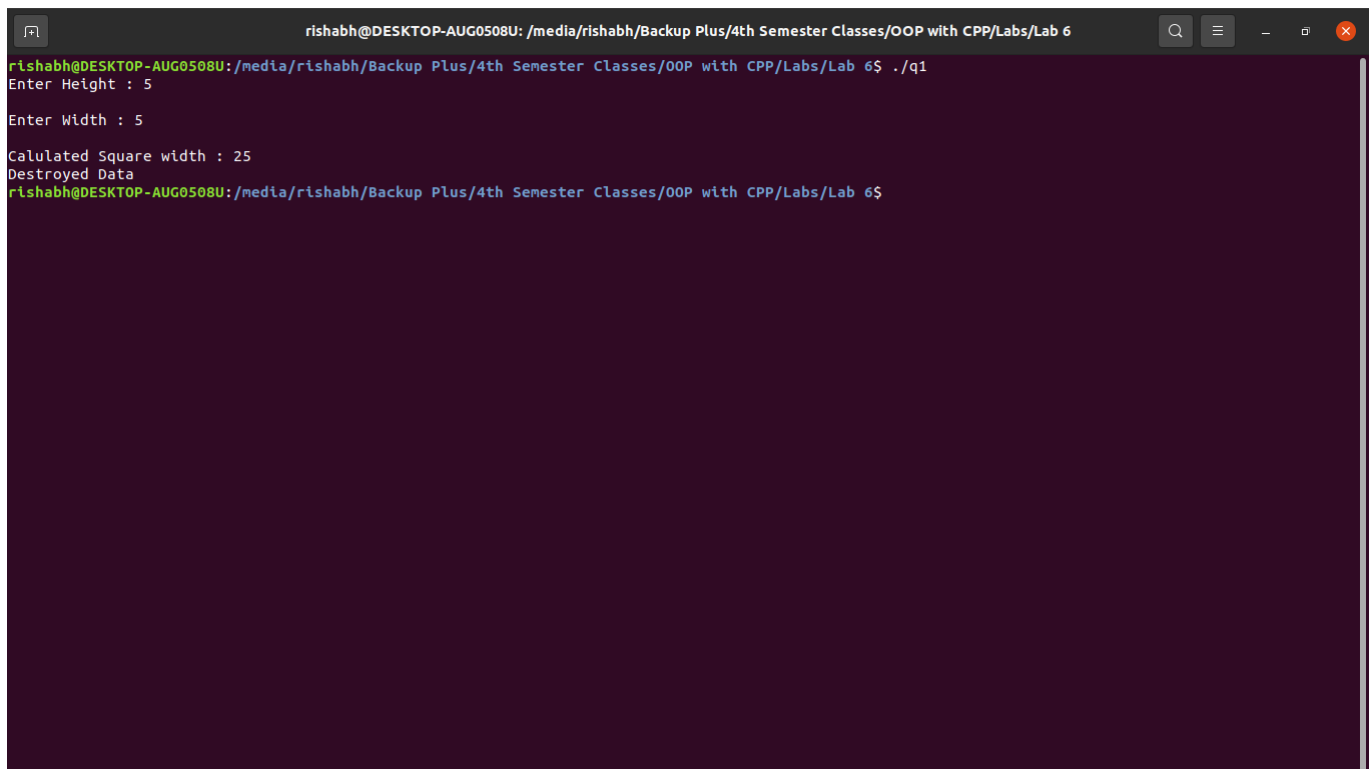
    calculateArea square;

    square.display("Calulated Square width :");

    square.display();

    return 0;
}
```

Output

A terminal window with a dark purple background. The title bar shows the user 'rishabh' on a machine 'DESKTOP-AUG0508U' in the directory '/media/rishabh/Backup Plus/4th Semester Classes/OOP with CPP/Labs/Lab 6'. The terminal content shows the execution of a program: the user enters '5' for height, then '5' for width. The program outputs 'Calulated Square width : 25' and 'Destroyed Data'. The prompt returns to the shell.

```
rishabh@DESKTOP-AUG0508U: /media/rishabh/Backup Plus/4th Semester Classes/OOP with CPP/Labs/Lab 6$ ./q1
Enter Height : 5
Enter Width : 5
Calulated Square width : 25
Destroyed Data
rishabh@DESKTOP-AUG0508U: /media/rishabh/Backup Plus/4th Semester Classes/OOP with CPP/Labs/Lab 6$
```