

# ***B.Tech Computer Engineering***

## ***Vth Semester***

### ***Lab 1***

#### ***Sub: OOPS Lab***

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**Q1.)** Create a class for counting the number of objects created and destroyed within various block using constructor and destructor.

```
#include <bits/stdc++.h>

using namespace std;

class counter
{
    int objectNumber;
    static int objectCount;

public:
    counter()
    {
        objectNumber = objectCount++;
    };
    ~counter()
    {
        objectCount--;
    };

    void printNumber()
    {
        cout << objectNumber << "\n";
    }

    static int printCount()
    {
        return objectCount;
    }
};

int counter::objectCount;
int main()
{
    {
        counter count1, count2;

        cout << counter::printCount() << "\n";
    }
}
```

```

        counter count3;
        cout << counter::printCount() << "\n";
    }

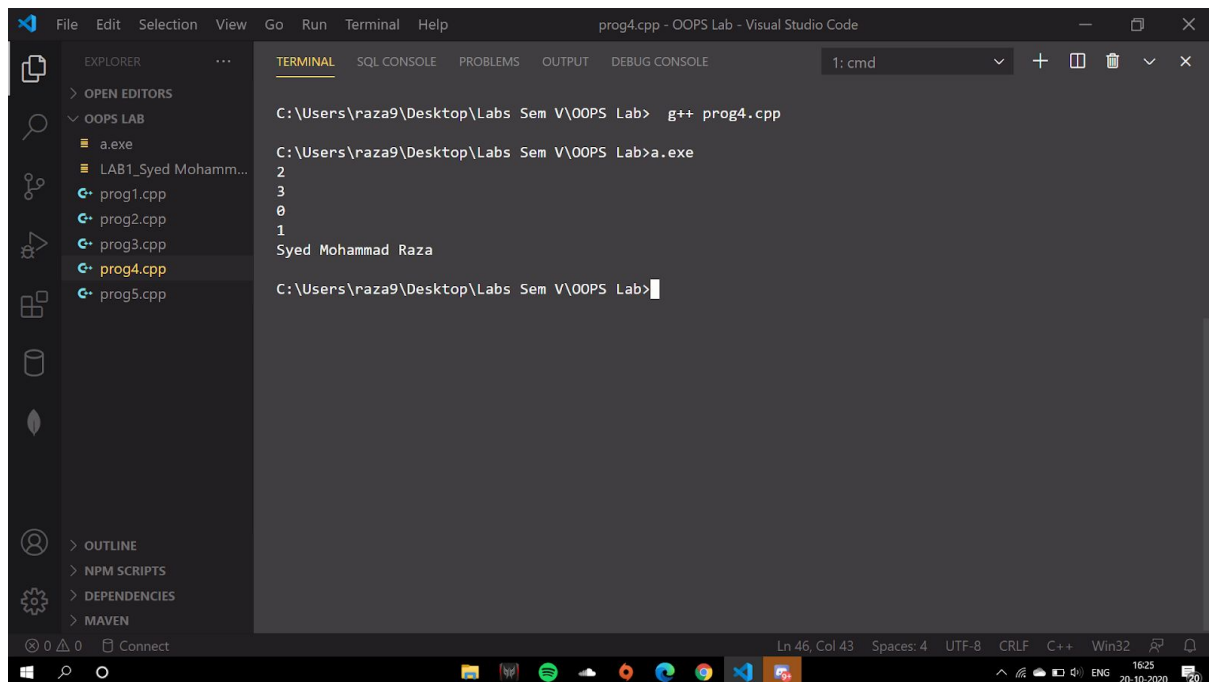
    cout << counter::printCount() << '\n';
    counter count1;
    cout << counter::printCount() << "\n";

    cout << "Syed Mohammad Raza"
         << "\n";

    return 0;
}

```

Output:



The screenshot shows the Visual Studio Code interface with the 'TERMINAL' tab active. The terminal displays the output of a C++ program. The command prompt shows the directory 'C:\Users\raza9\Desktop\Labs Sem V\OOPS Lab' and the command 'g++ prog4.cpp'. The output of the program is as follows:

```

C:\Users\raza9\Desktop\Labs Sem V\OOPS Lab> g++ prog4.cpp
C:\Users\raza9\Desktop\Labs Sem V\OOPS Lab>a.exe
2
3
0
1
Syed Mohammad Raza
C:\Users\raza9\Desktop\Labs Sem V\OOPS Lab>

```

The left sidebar shows the Explorer view with the file 'prog4.cpp' selected. The bottom status bar indicates the current line and column as 'Ln 46, Col 43'.