

# LAB WORK-10

**01. Write a C++ Program to print user roll, name (Input name through Terminal).**

**CODE:**

```
Practice > CPP > 01_Template.cpp > main()
1  #include <iostream>
2  using namespace std;
3  class student{
4  public:
5      int roll;
6      char name[50];
7      void print(){
8          cout<<"The roll number is: "<<roll<<endl;
9          cout<<"Enter name: ";
10         cin.get(name,50);
11         cout<<"Name: "<<name<<"\n"<<"Thank you";
12     }
13 };
14 int main(){
15     student std;
16     std.roll=21014026;
17     std.print();
18     cout<<"\n"<<"Program successfully Terminated.";
19     return 0;
20 }
```

**OUTPUT:**

```
The roll number is: 21014026
Enter name: Jolok Banarjee
Name: Jolok Banarjee
Thank you
Program successfully Terminated.
PS E:\Code\CSE 4192>
```

## 02. Write a C++ Program to find area and volume of a, b, c using private and public access specifier.

### CODE:

```
Practice > CPP > 03_Shape.cpp > main()
1  #include <iostream>
2  using namespace std;
3  class shape
4  {
5  private:
6      double length, breadth, height;
7
8  public:
9      void getData(double l, double b, double h)
10     {
11         length=l;
12         breadth=b;
13         height=h;
14     }
15     double area()
16     {
17         return length * breadth;
18     }
19     double volume()
20     {
21         return length * breadth * height;
22     }
23 };
24
25 int main()
26 {
27     shape u;
28     double a, b, c;
29     cout<<"Enter the value of a, b, c: ";
30     cin >> a >> b >> c;
31     u.getData(a, b, c);
32     cout << "Area: " << u.area() << " sqmeter" << endl;
33     cout << "Volume: " << u.volume() << " cubic meter" << endl;
34     return 0;
35 }
```

### OUTPUT:

```
Enter the value of a, b, c: 2.5 3 1.5
Area: 7.5 sqmeter
Volume: 11.25 cubic meter
PS E:\Code\CSE 4192> █
```

### 03. Write a C++ Program to print user information using Inheritance.

#### CODE:

```
Practice > C++ > 04_Inheritance.cpp > main()
1  #include<iostream>
2  using namespace std;
3
4  class sample
5  {
6  protected:
7      int age;
8  };
9  class sampleChild:public sample
10 {
11 public:
12     void displayAge(int a){
13         age=a;
14         cout<<"The age is: "<<age;
15     }
16 };
17 int main()
18 {
19     sampleChild r;
20     r.displayAge(34);
21
22     return 0;
23 }
```

#### OUTPUT:

```
The age is: 34
PS E:\Code\CSE 4192>
```