

Example1: write a program in C++, to create a class for calculate the volume of two boxes using class and object.

```
#include <iostream>
using namespace std;
class Box {
    public:
        double length;
        double breadth;
        double height;
};
int main() {
    Box Box1;
    Box Box2;
    double volume = 0.0;

    // box 1 specification
    Box1.height = 5.0;
    Box1.length = 6.0;
    Box1.breadth = 7.0;

    // box 2 specification
    Box2.height = 10.0;
```

```
Box2.length = 12.0;
Box2.breadth = 13.0;

// volume of box 1
volume = Box1.height * Box1.length * Box1.breadth;
cout << "Volume of Box1 : " << volume <<endl;

// volume of box 2
volume = Box2.height * Box2.length * Box2.breadth;
cout << "Volume of Box2 : " << volume <<endl;
return 0;
}
```

When the above code is compiled and executed, it produces the following result –

Volume of Box1 : 210

Volume of Box2 : 1560

Example2: write a program in C++, to create a class for calculate the area of the circle using class and object.

```
#include <iostream>
using namespace std;

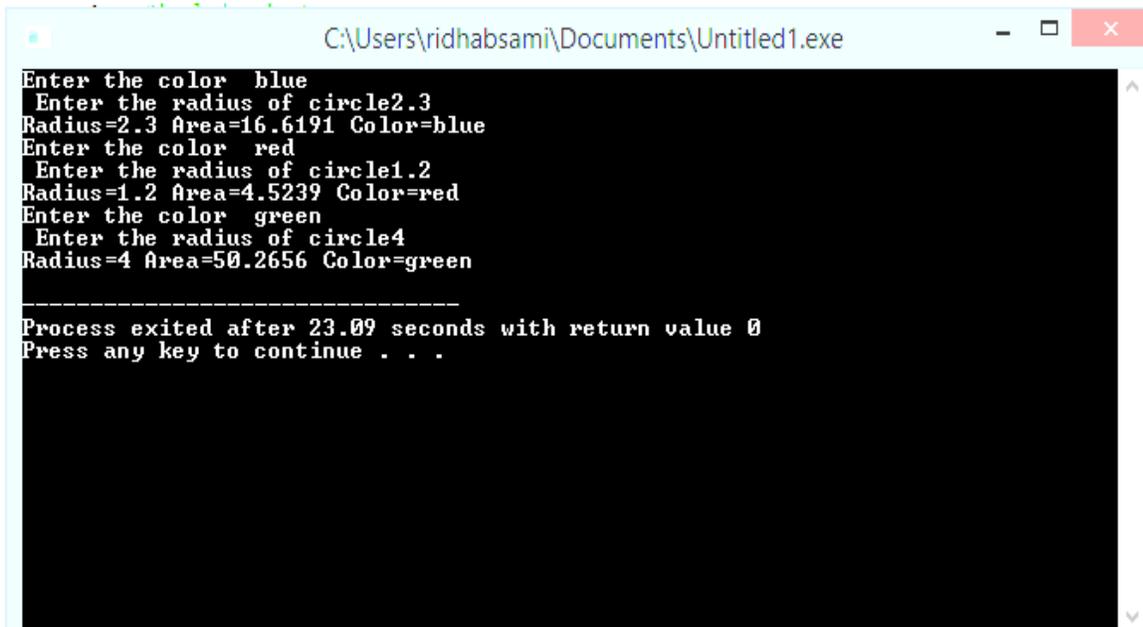
class Circle {
private:
    double radius;
    string color;
public:
    double getRadius() {
        cout<<" Enter the radius of circle";
        cin>> radius;
        return radius;
    }

    string getColor() {
        cout<<"Enter the color ";
        cin>> color;
        return color;
    }

    double getArea() {
        cout << "Radius=" << getRadius();
        return radius*radius*3.1416;
    }
};
```

```
int main() {  
    Circle c1,c2,c3;  
    cout << " Area=" << c1.getArea()  
        << " Color=" << c1.getColor( ) << endl;  
  
    cout << " Area=" << c2.getArea()  
        << " Color=" << c2.getColor() << endl;  
  
    cout << " Area=" << c3.getArea()  
        << " Color=" << c3.getColor( ) << endl;  
    return 0;  
}
```

The output of the program:



```
C:\Users\ridhabsami\Documents\Untitled1.exe  
Enter the color blue  
Enter the radius of circle2.3  
Radius=2.3 Area=16.6191 Color=blue  
Enter the color red  
Enter the radius of circle1.2  
Radius=1.2 Area=4.5239 Color=red  
Enter the color green  
Enter the radius of circle4  
Radius=4 Area=50.2656 Color=green  
-----  
Process exited after 23.09 seconds with return value 0  
Press any key to continue . . .
```

Example: write a program in C++, to create a class for input the number and cost for several items and display them.

```
#include <iostream>
using namespace std;
class item
{
private:
    int number;
    float cost;
public:
    void getdata(int a, float b);
    void putdata()
    {
        cout << "number :" << number << "\n";
        cout << "cost :" << cost << "\n";
    }
};
void item :: getdata(int a, float b)
{
    number = a;
    cost = b;
}
void main()
{
    item x; //create object x
    cout << "\n Object x " << "\n";
    x.getdata(100, 299.95);
    x.putdata();
    item y; //create another object y
    cout << "\n Object y " << "\n";
    y .getdata(200, 175.50);
    y .putdata();
}
```