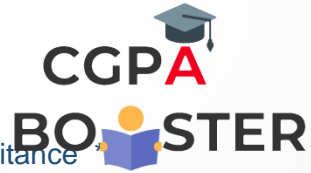


Solution Code



```
/* C++ Program to demonstrate an Example of Multilevel Inheritance
```

```
#include<iostream>
```

```
using namespace std;
```

```
class Circle{
```

```
protected:
```

```
float radius ;
```

```
public:
```

```
void Enter_r(void)
```

```
{
```

```
cout << "\n\t Enter the radius: "; cin >> radius ;
```

```
}
```

```
void Display_ca(void)
```

```
{
```

```
cout << "\t The area = " << (22/7 * radius*radius) ;
```

```
}
```

```
};
```

```
class Rectangle // Second base class
```

```
{
```

```
protected:
```

```
float length, breadth ;
```

```
public:
```

```
void Enter_lb(void)
```

```
{
```

```
cout << "\t Enter the length : "; cin >> length ;
```

```
cout << "\t Enter the breadth : "; cin >> breadth ;
```

```
}
```

```
void Display_ar(void)
```

```
{
```

```
cout << "\t The area = " << (length * breadth);
```

```
}
```

```
};
```

Solution Code



ç

```
class Cylinder : public Circle, public Rectangle // Derived class, inherited
{
    // from classes Circle & Rectangle

    public:
        void volume_cy(void)
        {
            cout << "\t The volume of the cylinder is: "
                << (22/7* radius*radius*length) ;
        }
};

int main()
{
    Circle c ;
    cout << "\n Getting the radius of the circle\n" ;
    c.Enter_r( );
    c.Display_ca( );
    Rectangle r ;
    cout << "\n\n Getting the length and breadth of the
rectangle\n\n";
    r.Enter_lb( );
    r.Display_ar( );
    Cylinder cy ; // Object cy of the class cylinder which can
access all the
// public members of the class circle as well as of the class
rectangle
    cout << "\n\n Getting the height and radius of the cylinder\n";
    cy.Enter_r( );
    cy.Enter_lb( );
    cy.volume_cy( );

    return 0;
}
```

