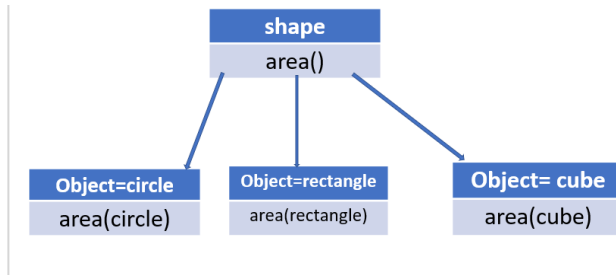# Polymorphism

Q1- What do you understand by polymorphism?

Ans1-Polymorphism is a method which allow object those have different internal structure. This is Greek word which means more than one form.

Q2- Wrp to find an area of different shapes by using polymorphism.

Ans2- following is the program-

#include <iostream>

using namespace std;

class Shape

{

  protected:

    int width, height;

  public:

    Shape(int a = 0, int b = 0)

{

      width = a;

      height = b;

```cpp
         }
         int area()
    {
         cout << " area :" <<endl;
         return 0;
      }
};
class Rectangle: public Shape
{
   public:
      Rectangle( int a = 0, int b = 0):Shape(a, b)
      int area ()
{
         cout << "Rectangle class area :" <<endl;
         return (width * height);
    }
};
class Triangle: public Shape
{
   public:
      Triangle( int a = 0, int b = 0):Shape(a, b)
      int area ()
{
```

```cpp
        cout << "Triangle class area :" <<endl;

        return (width * height / 2);

    }

};

int main()

{

  Shape *shape;

  Rectangle rect(30,20);

  Triangle  trig(12,6);

  shape = &rect;

   shape->area();

  shape = &trig;

  shape->area();

  return 0;}
```