LAB SHEET 6
(Method Overloading & Inheritance)

1. **Write a C# Program to find out the area of the triangle, square, and rectangle using method overloading.**

```
namespace myfirstproject
{
    internal class overloading
    {
        static void area(int a, int b)
        {
            Console.WriteLine("area of triangle is=" + ((a * b) / 2));
        }
        static void area(int a)
        {
            Console.WriteLine("area of square is=" + (a * a));
        }
        static void area(int a, double b)
        {
            Console.WriteLine("area of rectangle is=" + (a * b));
        }
        static void Main(string[] args)
        {
            overloading.area(8, 5);
            overloading.area(5);
            overloading.area(6, 8.7);
            Console.ReadKey();
        }
    }

}
```

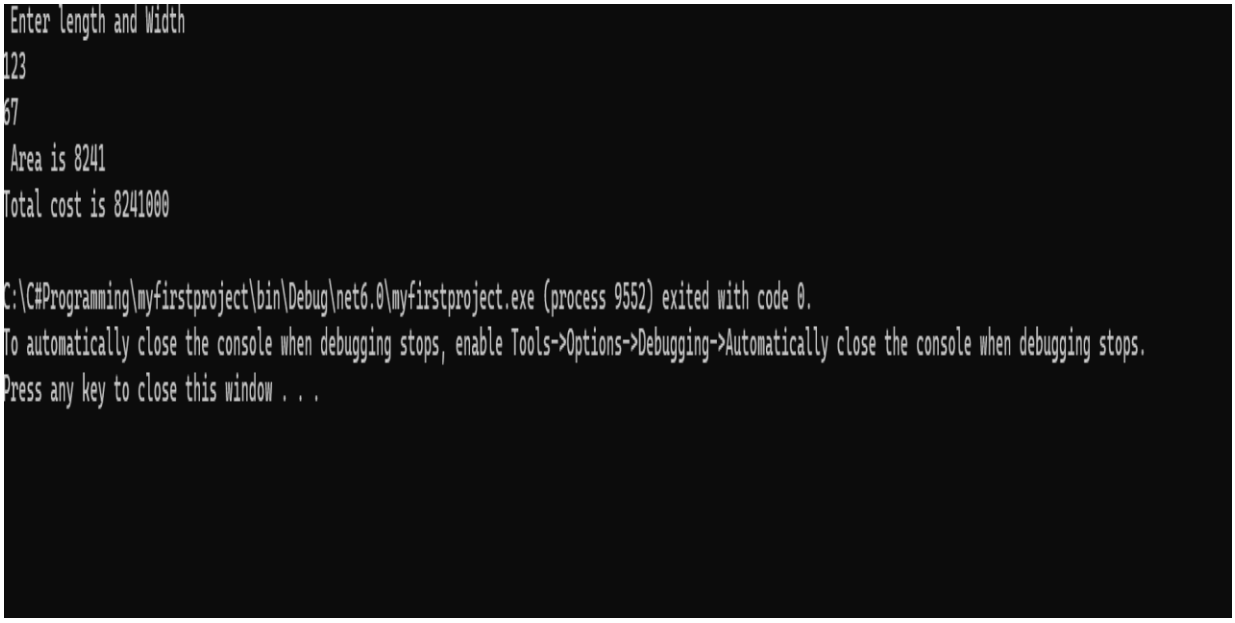
Assessment 6a:

Write a C# Program to find out the multiplication of two, three and four operands using method overloading.

2. **Create a Class called Rectangle and store length, width using constructor. Calculate the area using that. Create tabletop using rectangle class and calculate the cost of painting that table top.(Use single inheritance)**

```
namespace myfirstproject
{
    class Rectangle
    {
        protected double length, width;
        protected double calcarea;
        protected Rectangle()
        {
            length = 0;
            width = 0;
        }

        public void Area()
        {
            calcarea = length * width;
            Console.WriteLine(" Area is "+ calcarea);
        }
    }
    class tabletop : Rectangle
    {
        double cost;
        public tabletop()
        {
            cost = 0;
        }
        internal  tabletop(double length, double width)
        {
            this.length = length;
            this.width = width;
        }
        public void calcost()
        {
            Area(); //Method from the base class
            cost = 1000;
            double totalcost = calcarea * cost;
            Console.WriteLine("Total cost is " + totalcost);
        }
    }
    internal class Inheritance1
    {
        static void Main()
        {
            Console.WriteLine(" Enter length and Width");
            double l = Convert.ToDouble(Console.ReadLine());
            double w = Convert.ToDouble(Console.ReadLine());
            tabletop obj = new tabletop(l, w);
            obj.calcost();
        }
    }
}
```



Assessment 6b:

Create a class called Employee with id and salary. Employee class is inheriting from Human class. Name and age should be defined in Human class. Include display method in Employee class to display all details.