```
using System;
namespace ConsoleApplication
{
  delegate void PrintDelegate(); // Delegate declaration
  class ShapeArea
    public void Rectangle()
      Console. Write("Enter the length of the rectangle: ");
      int length = int.Parse(Console.ReadLine());
      Console.Write("Enter the breadth of the rectangle: ");
      int breadth = int.Parse(Console.ReadLine());
      Console.WriteLine("Area of rectangle: " + (length * breadth));
    public void Triangle()
      Console. Write("Enter the base of the triangle: ");
      int base1 = int.Parse(Console.ReadLine());
      Console.Write("Enter the height of the triangle: ");
      int height = int.Parse(Console.ReadLine());
      Console.WriteLine("Area of triangle: " + ((base1 * height) / 2));
    }
    public void Square()
      Console. Write("Enter the side of the square: ");
      int side = int.Parse(Console.ReadLine());
      Console.WriteLine("Area of square: " + (side * side));
  class Program
    static void Main()
      ShapeArea shape = new ShapeArea();
      PrintDelegate printDelegate;
      int option;
      do
        Console.Clear();
        Console.WriteLine("1. Area of Rectangle");
        Console.WriteLine("2. Area of Triangle");
        Console.WriteLine("3. Area of Square");
        Console.WriteLine("4. Exit");
        Console.Write("Choose an option: ");
        option = int.Parse(Console.ReadLine());
        switch (option)
        {
          case 1:
```

```
printDelegate = shape.Rectangle;
       break;
    case 2:
       printDelegate = shape.Triangle;
       break;
    case 3:
       printDelegate = shape.Square;
       break;
     case 4:
       Environment.Exit(0);
    default:
       Console.WriteLine("Invalid option. Try again.");
       Console.ReadLine();
       continue;
  }
  Console.Clear();
  printDelegate(); // Call the selected method via the delegate
  Console.ReadLine();
} while (option != 4);
```