1). using System;

```
class Program
{
   static void Main()
   {
      Console.Write("Enter the length: ");
      double length = Convert.ToDouble(Console.ReadLine());

      Console.Write("Enter the width: ");
      double width = Convert.ToDouble(Console.ReadLine());

      double area = CalculateArea(length, width);

      Console.WriteLine($"The area of the rectangle is: {area}");
   }

   static double CalculateArea(double length, double width)
   {
      return length * width;
   }
}
```

2).using System;

```
class Program
{
   static void Main()
   {
      for (int i = 0; i < 10; i++)
```

```
    {
        Console.Write($"Enter number #{i + 1}: ");
        int number = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine($"{number} is {(number % 2 == 0 ? "even" : "odd")}");
    }
  }
}
```

3).

```
using System;

class Program
{
  static void Main()
  {
    Console.Write("Enter a positive integer: ");
    int n = Convert.ToInt32(Console.ReadLine());

    if (n < 0)
    {
      Console.WriteLine("ERROR");
    }
    else
    {
      int sum = 0;
      for (int i = 1; i <= n; i++)
      {
        sum += i;
      }
```

```
        Console.WriteLine($"The sum of numbers from 1 to {n} is: {sum}");
      }
    }
}
```

4).

```
using System;

class Program
{
    static void Main()
    {
        Console.Write("Enter a positive integer (N): ");
        int n = Convert.ToInt32(Console.ReadLine());

        if (n < 0)
        {
            Console.WriteLine("ERROR");
        }
        else
        {
            int sum = SumRecursively(n);

            Console.WriteLine($"The sum of numbers from 1 to {n} is: {sum}");
        }
    }

    static int SumRecursively(int n)
    {
        if (n == 0)
            return 0;
```

```
        else
            return n + SumRecursively(n - 1);
    }
}
```

5).

```
using System;

class Program
{
    static void Main()
    {
        Console.Write("Enter a number: ");
        int number = Convert.ToInt32(Console.ReadLine());

        Console.WriteLine($"Multiplication table for {number}:");

        for (int i = 1; i <= 10; i++)
        {
            Console.WriteLine($"{number} x {i} = {number * i}");
        }
    }
}
```

6).

```
using System;

class Program
{
    static void Main()
    {
        Console.Write("Enter student's name: ");
```

```
        string name = Console.ReadLine();

        Console.Write("Enter exam marks: ");
        int marks = Convert.ToInt32(Console.ReadLine());

        char grade = DetermineGrade(marks);

        Console.WriteLine($"{name} scored {marks} marks. Grade: {grade}");
    }

    static char DetermineGrade(int marks)
    {
        if (marks >= 75 && marks <= 100)
            return 'A';
        else
            return 'F'; // You might want to extend this with more grading criteria
    }
}
using System;

class Program
{
    static double balance = 1000; // Initial balance

    static void Main()
    {
        while (true)
        {
            Console.WriteLine("\nATM Menu:");
```

```
        Console.WriteLine("1. Check Balance");
        Console.WriteLine("2. Deposit Money");
        Console.WriteLine("3. Withdraw Money");
        Console.WriteLine("4. Exit");

        Console.Write("Enter your choice (1-4): ");
        string choice = Console.ReadLine();

        switch (choice)
        {
            case "1":
                CheckBalance();
                break;
            case "2":
                Deposit();
                break;
            case "3":
                Withdraw();
                break;
            case "4":
                Console.WriteLine("Exiting the ATM. Thank you!");
                return;
            default:
                Console.WriteLine("Invalid choice. Please enter a number between 1 and 4.");
                break;
        }
    }
}
```

```
static void CheckBalance()
{
   Console.WriteLine($"Your balance is: ${balance}");
}

static void Deposit()
{
   Console.Write("Enter the amount to deposit: $");
   if (double.TryParse(Console.ReadLine(), out double amount) && amount > 0)
   {
      balance += amount;
      Console.WriteLine($"Deposited ${amount}. New balance is: ${balance}");
   }
   else
   {
      Console.WriteLine("Invalid amount. Please enter a positive number.");
   }
}

static void Withdraw()
{
   Console.Write("Enter the amount to withdraw: $");
   if (double.TryParse(Console.ReadLine(), out double amount) && amount > 0)
   {
      if (amount <= balance)
      {
         balance -= amount;
         Console.WriteLine($"Withdrew ${amount}. New balance is: ${balance}");
      }
```

```
            else
            {
                Console.WriteLine("Insufficient funds. Withdrawal failed.");
            }
        }
        else
        {
            Console.WriteLine("Invalid amount. Please enter a positive number.");
        }
    }
}
```