Lab Sheet 02

1.

using System;

class Book

{

public string Title { get; set; }

public string Author { get; set; }

}

class Program

{

static void Main()

{

Book myBook = new Book

{

Title = "The Great Gatsby",

Author = "F. Scott Fitzgerald"

};

Console.WriteLine($"Title: {myBook.Title}, Author: {myBook.Author}");

}

}

2.

using System;

class BankAccount

{

public string AccountNumber { get; set; }

public decimal Balance { get; set; }

public void Deposit(decimal amount)

{

Balance += amount;

}

}

class Program

{

static void Main()

{

BankAccount myAccount = new BankAccount

{

AccountNumber = "123456",

Balance = 1000.00m

};

myAccount.Deposit(500.50m);

Console.WriteLine($"Account Number: {myAccount.AccountNumber}, Balance: ${myAccount.Balance}");

}

}

3.

using System;

class TemperatureTracker

{

private int[] dailyTemperatures = new int[7];

public void InputTemperatures()

{

Console.WriteLine("Enter daily temperatures for the week:");

for (int i = 0; i < 7; i++)

{

Console.Write($"Day {i + 1}: ");

dailyTemperatures[i] = Convert.ToInt32(Console.ReadLine());

}

}

public void DisplayTemperatureReport()

{

Console.WriteLine("Weekly Temperature Report:");

for (int i = 0; i < 7; i++)

{

Console.WriteLine($"Day {i + 1}: {dailyTemperatures[i]}°C");

}

}

}

class Program

{

static void Main()

{

TemperatureTracker tracker = new TemperatureTracker();

tracker.InputTemperatures();

tracker.DisplayTemperatureReport();

}

}

4.

using System;

class Product

{

public string ProductName { get; set; }

public decimal Price { get; set; }

public Product(string productName, decimal price)

{

ProductName = productName;

Price = price;

}

}

class Program

{

static void Main()

{

Product laptop = new Product("Laptop", 899.99m);

Console.WriteLine($"Product: {laptop.ProductName}, Price: ${laptop.Price}");

}

}

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 studentName = Console.ReadLine();

Console.Write("Enter exam marks: ");

int marks = Convert.ToInt32(Console.ReadLine());

char grade = DetermineGrade(marks);

Console.WriteLine($"{studentName} achieved Grade {grade}");

}

static char DetermineGrade(int marks)

{

if (marks >= 75 && marks <= 100)

{

return 'A';

}

else if (marks >= 60 && marks <= 74)

{

return 'B';

}

else if (marks >= 50 && marks <= 59)

{

return 'C';

}

else

{

return 'F'; // Grade F for marks below 50

}

}

}