Day -2 of .net assignment

1. Code of account details:-

```csharp
using System;

class BankAccount
{
    public int AccountId { get; set; }
    public string AccountType { get; set; }
    public double Balance { get; private set; }

    public BankAccount(int accountId, string accountType, double initialBalance)
    {
        AccountId = accountId;
        AccountType = accountType;
        Balance = initialBalance;
    }

    public void Withdraw(double amount)
```

```csharp
    {
        if (amount <= Balance)
        {
            Balance -= amount;
            Console.WriteLine("Withdrawal successful. New balance: " + Balance);
        }
        else
        {
            Console.WriteLine("Insufficient funds.");
        }
    }

    public override string ToString()
    {
        return $"Account Id: {AccountId}\nAccount Type: {AccountType}\nBalance: {Balance}";
    }
}

class Program
{
```

```csharp
static void Main()
{
    // Sample Input 1
    BankAccount account1 = new BankAccount(111, "savings", 5000);
    Console.WriteLine(account1);
    account1.Withdraw(3000);
    Console.WriteLine(account1);


    // Sample Input 2
    BankAccount account2 = new BankAccount(123, "current", 3567);
    Console.WriteLine(account2);
    // Withdraw amount not given in the image
}
}
```

OutPut:-

Output

Clear

```
mono /tmp/6OfSJcRYeS.exe
Account Id: 111
Account Type: savings
Balance: 5000
Withdrawal successful. New balance: 2000
Account Id: 111
Account Type: savings
Balance: 2000
Account Id: 123
Account Type: current
Balance: 3567

=== Code Execution Successful ===
```

2.code of the addition ,subtraction and division.

```csharp
using System;

class Program
{
    static void Main(string[] args)
    {
        while (true)
        {
            Console.WriteLine("Enter the operator:");
            string op = Console.ReadLine();

            if (op == "+" || op == "-" || op == "*" || op == "/")
            {
                Console.WriteLine("Enter the first operand:");
                int num1 = int.Parse(Console.ReadLine());

                Console.WriteLine("Enter the second operand:");
                int num2 = int.Parse(Console.ReadLine());

                switch (op)
                {
                    case "+":
```

```csharp
                Console.WriteLine($"Result of {num1} + {num2} is {num1 + num2}");
                break;
            case "-":
                Console.WriteLine($"Result of {num1} - {num2} is {num1 - num2}");
                break;
            case "*":
                Console.WriteLine($"Result of {num1} * {num2} is {num1 * num2}");
                break;
            case "/":
                if (num2 == 0)
                {
                    Console.WriteLine("Division by zero not allowed.");
                }
                else
                {
                    Console.WriteLine($"Result of {num1} / {num2} is {num1 / num2}");
                    Console.WriteLine($"Remainder: {num1 % num2}");
                }
```

```csharp
                }
                break;
            }
        }
        else
        {
            Console.WriteLine("Invalid Operator");
        }
    }
  }
}
```
Output:-

Output   Clear

```
mono /tmp/ecpSxNYscq.exe
Enter the operator:
+
Enter the first operand:
12
Enter the second operand:
10
Result of 12 + 10 is 22
Enter the operator:
/
Enter the first operand:
11
Enter the second operand:
2
Result of 11 / 2 is 5
Remainder: 1
Enter the operator:
&
```

3.code for class game

```csharp
using System;

class Game
{
    public string Name { get; set; }
    public int MaxPlayers { get; set; }

    public Game(string name, int maxPlayers)
    {
        Name = name;
        MaxPlayers = maxPlayers;
    }
}

class GameWithTimeLimit : Game
{
    public int TimeLimitMinutes { get; set; }

    public GameWithTimeLimit(string name, int maxPlayers, int timeLimitMinutes) : base(name, maxPlayers)
    {
        TimeLimitMinutes = timeLimitMinutes;
```

```csharp
    }
}

class Program
{
    static void Main(string[] args)
    {
        Console.Write("Enter a game: ");
        string gameName = Console.ReadLine();

        Console.Write("Enter the maximum number of players: ");
        int maxPlayers = int.Parse(Console.ReadLine());

        Game game1 = new Game(gameName, maxPlayers);

        Console.Write("Enter a game that has time limit: ");
        string gameName2 = Console.ReadLine();

        Console.Write("Enter the maximum number of players: ");
        int maxPlayers2 = int.Parse(Console.ReadLine());
```

```csharp
        Console.Write("Enter the time limit in minutes: ");

        int timeLimit = int.Parse(Console.ReadLine());


        GameWithTimeLimit game2 = new
GameWithTimeLimit(gameName2, maxPlayers2, timeLimit);


        Console.WriteLine($"Maximum number of players for
{game1.Name} is {game1.MaxPlayers}");

        Console.WriteLine($"Maximum number of players for
{game2.Name} is {game2.MaxPlayers}");

        Console.WriteLine($"Time Limit for {game2.Name} is
{game2.TimeLimitMinutes} minutes");
    }
}
```
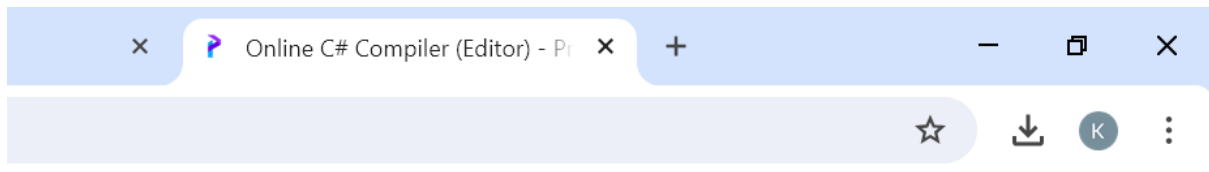
Output:-

Programiz PRO ›

Output

Clear

```
mono /tmp/aKuYu2KwtW.exe
Enter a game: cricket
Enter the maximum number of players: 11
Enter a game that has time limit: football
Enter the maximum number of players: 11
Enter the time limit in minutes: 90
Maximum number of players for cricket is 11
Maximum number of players for football is 11
Time Limit for football is 90 minutes


=== Code Execution Successful ===
```

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