

Day 5

C#

1) Practice

ElectricReading.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Xml;

namespace SimplePrograms
{
    internal class ElectricReading
    {
        private int consumernumber, previousreading, currentreading;
        private string consumername, consumertype;

        public ElectricReading(int consumernumber, string consumername, int
currentreading, int previousreading, string consumertype)
        {
            Consumernumber = consumernumber;
            Previousreading = previousreading;
            Currentreading = currentreading;
            Consumername = consumername;
            Consumertype = consumertype;
        }

        public int Consumernumber { get => consumernumber; set =>
consumernumber = value; }
        public int Previousreading { get => previousreading; set =>
previousreading = value; }
        public int Currentreading { get => currentreading; set => currentreading =
value; }
        public string Consumername { get => consumername; set =>
consumername = value; }
        public string Consumertype { get => consumertype; set => consumertype
= value; }

        public int CalculateBill()
        {
            int consumption = Currentreading - Previousreading;
```

```

int billamt = 0;
if (Consumertype.Equals("Domestic"))
{
    if (consumption <= 100)
    {
        billamt = 0;
    }
    else if (consumption > 100 && consumption <= 200) {
        billamt = (consumption - 100) * 2;
    }
    else if (consumption > 200 && consumption <= 500)
    {
        billamt = (consumption - 100) * 5;
    }
    else if (consumption > 500)
    {
        billamt = (consumption - 100) * 10;
    }

}
else if (Consumertype.Equals("Commercial"))
{
    if (consumption <= 100)
    {
        billamt = 10;
    }
    else if (consumption > 100 && consumption <= 200)
    {
        billamt = (consumption - 100) * 20;
    }
    else if (consumption > 200 && consumption <= 500)
    {
        billamt = (consumption - 100) * 50;
    }
    else if (consumption > 500)
    {
        billamt = (consumption - 100) * 100;
    }
}
return billamt;
}

```

```

        /* public void DisplayBillDetails()
        {
            int billamt=CalculateBill();
            Console.WriteLine("Bill : " + consumernumber + " " + consumername +
" " + billamt);
        }*/

    }
}

```

Program.cs

using SimplePrograms;

```

/*int consumernumber = Convert.ToInt32(Console.ReadLine());
string? consumername = Console.ReadLine();
int currentreading = Convert.ToInt32(Console.ReadLine());
int previousreading = Convert.ToInt32(Console.ReadLine());
string? consumertype = Console.ReadLine();*/

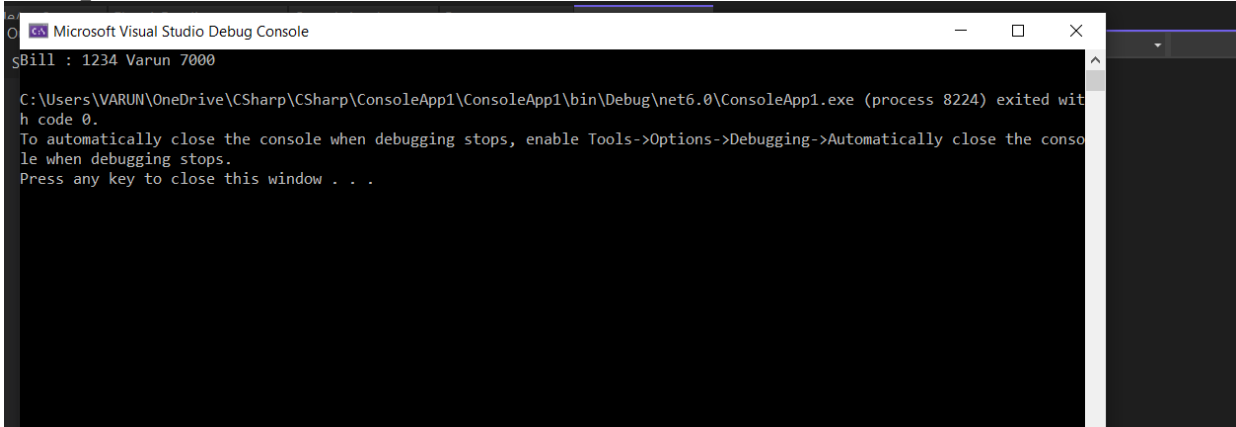
```

```

ElectricReading electricReading = new ElectricReading(1234, "Varun", 2000,
1200, "Domestic");
int billamt = electricReading.CalculateBill();
Console.WriteLine($"Bill : " + $"{electricReading.Consumernumber}
{electricReading.Consumername} {billamt}");

```

Output



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output displays the result of the program execution: "gBill : 1234 Varun 7000". Below this, a message indicates that the application has exited successfully: "C:\Users\VARUN\OneDrive\CSharp\CSharp\ConsoleApp1\ConsoleApp1\bin\Debug\net6.0\ConsoleApp1.exe (process 8224) exited with code 0." It also provides instructions on how to automatically close the console window when debugging stops.

```

Microsoft Visual Studio Debug Console
gBill : 1234 Varun 7000
C:\Users\VARUN\OneDrive\CSharp\CSharp\ConsoleApp1\ConsoleApp1\bin\Debug\net6.0\ConsoleApp1.exe (process 8224) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

2)Assignment 1

Program.cs

BankAccount.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace ConsoleApp1
{
    internal class BankBook
    {

        private readonly int acc_number;
        private int balance;
        private string acc_holder_name;

        public BankBook(string acc_holder_name)
        {
            acc_number = 123456;
            Acc_holder_name = acc_holder_name;
            Balance = 0;
        }

        public int Acc_number => acc_number;

        public int Balance { get => balance; set => balance = value; }
        public string Acc_holder_name { get => acc_holder_name; set =>
acc_holder_name = value; }

        public void Deposit(int dep_amount)
        {
            if (dep_amount <= 0)
            {
                Console.WriteLine("inadequate amount");
            }
            else
            {
                Balance = dep_amount + Balance;
            }
        }
    }
}
```

```

    }
}
public void Withdraw(int withdraw_Amount)
{
    if (withdraw_Amount <= 0)
    {
        Console.WriteLine("Zero balance");
    }
    else if (Balance >= withdraw_Amount)
    {
        Balance = Balance - withdraw_Amount;
    }
    else
    {
        Console.WriteLine("please enter amount correctly");
    }
}
public void Display()
{
    Console.WriteLine("Acc Number : " + Acc_number);
    Console.WriteLine("Acc Holder Name:" + Acc_holder_name);
    Console.WriteLine("Balance:" + Balance);

}
}
}

```

```

Console.WriteLine("acc_name : ");
string acc_holder_name = Console.ReadLine();
Console.WriteLine("dep_amount ");
int Deposit_Amount = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("withdraw amount : ");
int withdraw_Amount = Convert.ToInt32(Console.ReadLine());

```

```

BankBook bankAccount = new BankBook(acc_holder_name);

```

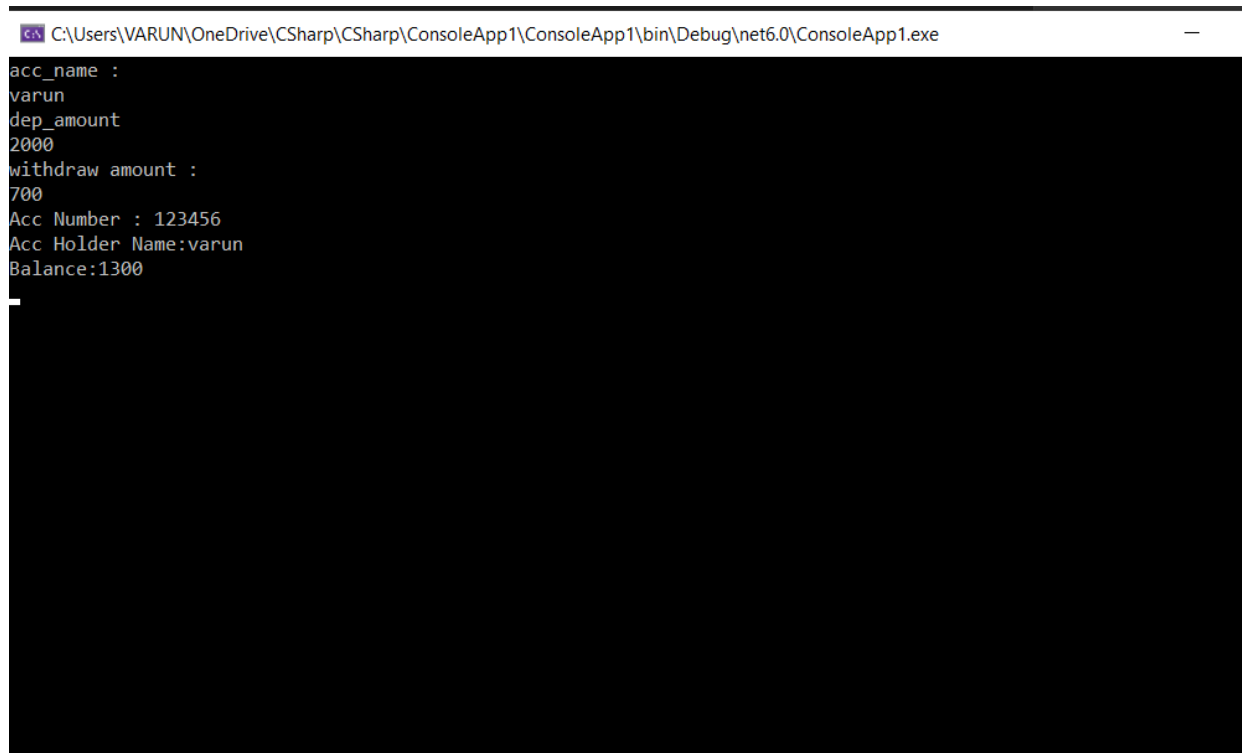
```

bankAccount.Deposit(Deposit_Amount);

```

```
bankAccount.Withdraw(withdraw_Amount);  
bankAccount.Display();  
Console.ReadLine();
```

Output



The screenshot shows a Windows console window titled "C:\Users\VARUN\OneDrive\CSharp\CSharp\ConsoleApp1\ConsoleApp1\bin\Debug\net6.0\ConsoleApp1.exe". The output of the program is as follows:

```
acc_name :  
varun  
dep_amount  
2000  
withdraw amount :  
700  
Acc Number : 123456  
Acc Holder Name:varun  
Balance:1300
```

