

Practical-4

1. Write a program to create a Class named ATM having following methods which performs ATM transaction:

Balance_check():- To Check the balance of Current Account

Debit() :- To Withdraw money into Current Account

Credit() :- To add money into Current Account

Get_info() :- To see information of Account Holder

Code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace Practical_4
{
    class ATM
    {
        public int credit(int balance)
        {
            int c;
            Console.WriteLine("Enter The amount to credit:");
            c = Convert.ToInt32(Console.ReadLine());
            balance = balance + c;
            Console.WriteLine("Blance of your account=" + balance);
            return balance;
        }
        public int debit(int balance)
        {
            int c;
            Console.WriteLine("Enter the amount to debit:");
            c = Convert.ToInt32(Console.ReadLine());
            balance = balance - c;
        }
    }
}
```

```

        Console.WriteLine("balance of your account=" + balance);
        return balance;
    }
    public void balance_check(int balance)
    {
        Console.WriteLine("Your balance=" + balance);
    }
    public void get_info(string Name, int balance, int Acc_no)
    {
        Console.WriteLine("Name=" + Name);
        Console.WriteLine("Balance=" + balance);
        Console.WriteLine("Account No=" + Acc_no);
    }
}
class Program
{
    public static void Main(string[] args)
    {
        Console.WriteLine("2001201110_Patel Vandan\n");
        int a, Ano, p, Acc_no = 101010, pswd = 123456, balance = 150000;
        String Name = "Keval";
        Console.WriteLine("Enter Account No:");
        Ano = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Enter Password:");
        p = Convert.ToInt32(Console.ReadLine());
        if (Acc_no == Ano && pswd == p)
        {
            Console.WriteLine("WElcome");
l:
            ATM A = new ATM();
            Console.WriteLine("Give your choice:");
            Console.WriteLine("1.credit\n2.debit\n3.balance
check\n4.getinfo");

            a = Convert.ToInt32(Console.ReadLine());
            switch (a)
            {
                case 1:
                    balance = A.credit(balance);
                    goto l;
                case 2:
                    balance = A.debit(balance);
                    goto l;
                case 3:
                    A.balance_check(balance);

```

```
        goto 1;
    case 4:
        A.get_info(Name, balance, Acc_no);
        goto 1;
    default:
        break;
    }
}
}
```

Output:

```
C:\Users\Vandan\source\repos\Practical_4\Practical_4\bin\Debug\net5.0\Practical_4.exe
Enter The amount to credit:
3000
Blance of your account=153000
Give your choice:
1.credit
2.debit
3.balance check
4.getinfo
5.Exit
2
Enter the amount to debit:
100000
balance of your account=53000
Give your choice:
1.credit
2.debit
3.balance check
4.getinfo
5.Exit
4
Name=Vandan Patel
Balance=53000
Account No=202022
Give your choice:
1.credit
2.debit
3.balance check
4.getinfo
5.Exit
```

2. Write a program to find frequency of each element in an array using command Line Arguments.

Code:

```
using System;
using System.Collections.Generic;
using System.Linq;
```

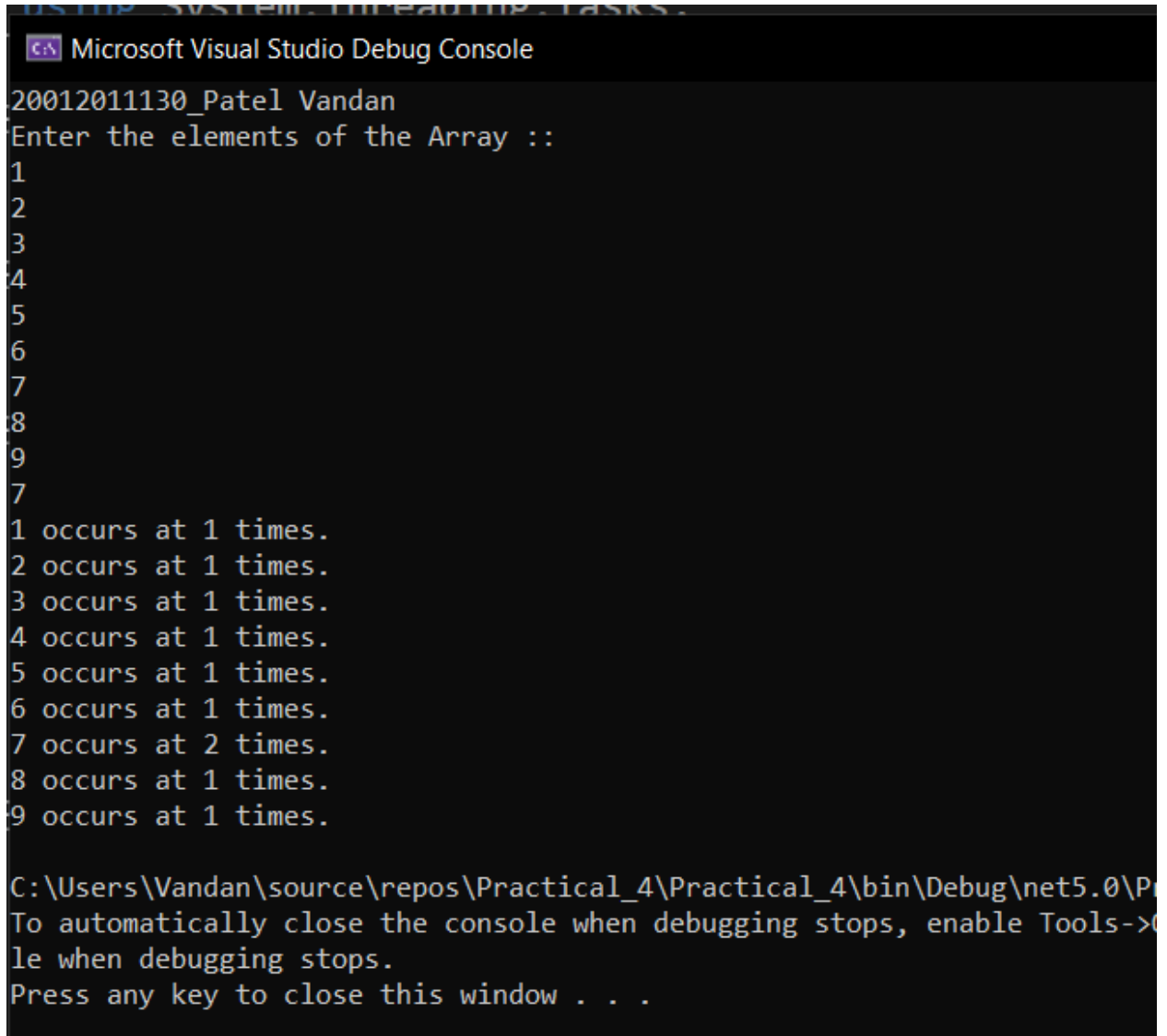
```
using System.Text;
using System.Threading.Tasks;

namespace Practical_4
{
    class second
    {
        static void Main(string[] args)
        {
            int i, j, count;

            int[] b = new int[10];
            Console.WriteLine("20012011130_Patel Vandan");
            Console.WriteLine("Enter the elements of the Array :: ");
            for (i = 0; i < 10; i++)
            {
                Console.WriteLine(args[i]);
                b[i] = -1;
            }
            for (i = 0; i < 10; i++)
            {
                count = 1;
                for (j = i + 1; j < 10; j++)
                {
                    if (args[i] == args[j])
                    {
                        count++;
                        b[j] = 0;
                    }
                }
                if (b[i] != 0)
                {
                    b[i] = count;
                }
            }

            for (i = 0; i < 10; i++)
            {
                if (b[i] != 0)
                {
                    Console.WriteLine("{0} occurs at {1} times.",
args[i], b[i]);
                }
            }
            Console.ReadKey();
        }
    }
}
```

```
}  
}
```

Output:

The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output is as follows:

```
20012011130_Patel Vandan  
Enter the elements of the Array ::  
1  
2  
3  
4  
5  
6  
7  
8  
9  
7  
1 occurs at 1 times.  
2 occurs at 1 times.  
3 occurs at 1 times.  
4 occurs at 1 times.  
5 occurs at 1 times.  
6 occurs at 1 times.  
7 occurs at 2 times.  
8 occurs at 1 times.  
9 occurs at 1 times.  
  
C:\Users\Vandan\source\repos\Practical_4\Practical_4\bin\Debug\net5.0\Practical_4.exe  
To automatically close the console when debugging stops, enable Tools->Options->Debug->Close console when debugging stops.  
Press any key to close this window . . .
```

3. Write a program to explain StringBuilder Class. [Note: Use Append(), AppendFormat(), Insert(), Remove(), Replace() Methods.]

Code:

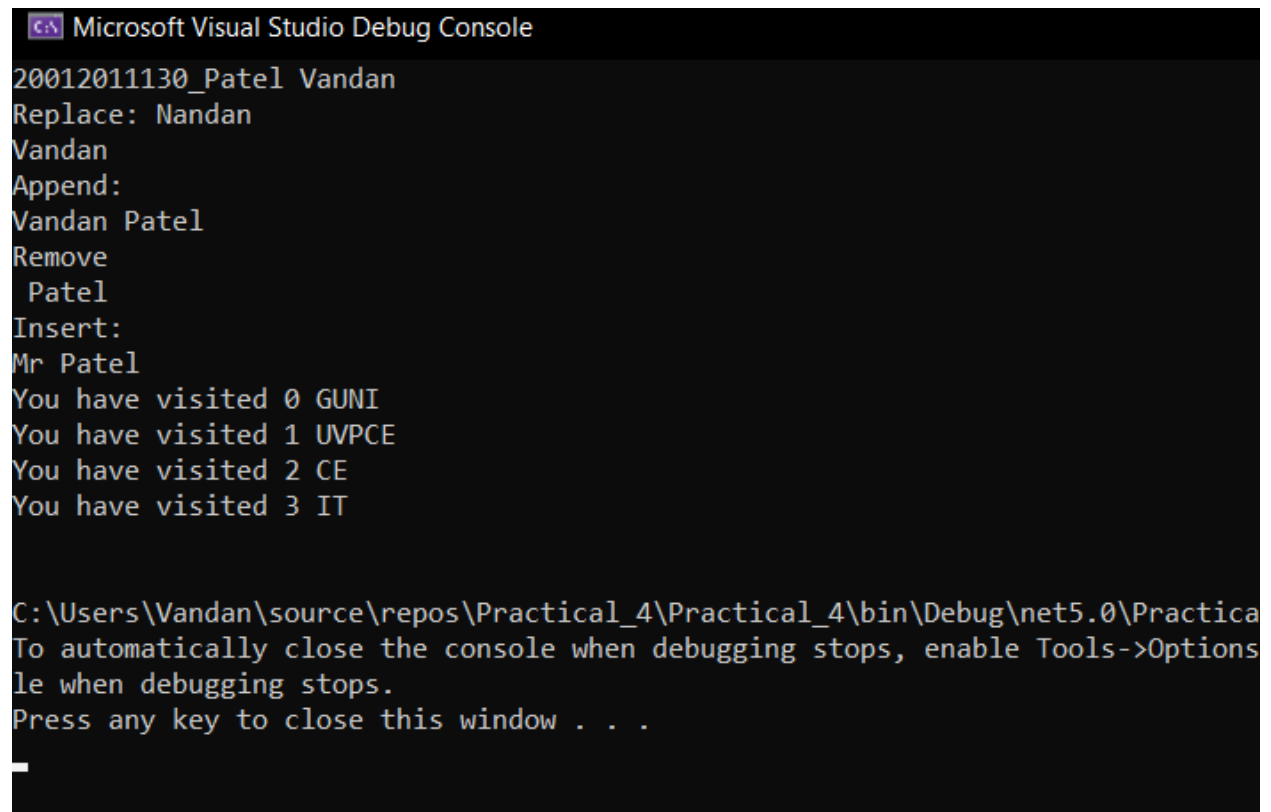
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Practical_4
{
    class third
    {
        static void Main(string[] args)
        {
            Console.WriteLine("20012011130_Patel Vandan");
            String v = "Nandan";
            StringBuilder sb = new StringBuilder(v);
            //Replace
            Console.WriteLine("Replace: Nandan");
            sb.Replace("N", "V");
            Console.WriteLine(sb);
            //Append
            Console.WriteLine("Append: ");
            sb.Append(" Patel");
            Console.WriteLine(sb);
            Console.WriteLine("Remove");
            sb.Remove(0, 6);
            Console.WriteLine(sb);
            Console.WriteLine("Insert:");
            sb.Insert(0, "Mr");
            Console.WriteLine(sb);

            //Use appendFormat
            String[] a = { "GUNI", "UVPCE", "CE", "IT" };
            int counter = 0;
            StringBuilder b = new StringBuilder();

            foreach (String value in a)
            {
                b.AppendFormat("You have visited {0} {1}\n",
counter++, value);
            }
        }
    }
}
```

```
    }  
    Console.WriteLine(b);  
  
    Console.ReadKey();  
}  
}  
}
```

Output:

The screenshot shows the Microsoft Visual Studio Debug Console with the following output:

```
20012011130_Patel Vandan  
Replace: Nandan  
Vandan  
Append:  
Vandan Patel  
Remove  
Patel  
Insert:  
Mr Patel  
You have visited 0 GUNI  
You have visited 1 UVPCE  
You have visited 2 CE  
You have visited 3 IT  
  
C:\Users\Vandan\source\repos\Practical_4\Practical_4\bin\Debug\net5.0\Practica  
To automatically close the console when debugging stops, enable Tools->Options  
le when debugging stops.  
Press any key to close this window . . .  
_
```