

Practical-4

Console applications: ObjectOriented Programming, StringBuilder And CommandLine Argument

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; namespace
practical_4
{
    class Program
    {
        static void Main(string[] args)
        {
            int acc_no=077;
            String name = "anuj";
            int password = 1234;
            int balance = 86000;
            int a, b;
            Console.WriteLine("Enter your Acc_no: ");
            a = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter your Password:");
            b = Convert.ToInt32(Console.ReadLine());

            if (a == acc_no && b == password )
            {
                first:
                Console.WriteLine("Hey," + name);
                Console.WriteLine("1.Deposit");
                Console.WriteLine("2.Withdraw");
                Console.WriteLine("3.Check Balance");
                Console.WriteLine("4.Display your information");
                Console.WriteLine("Choose your Choice:");
                int n
                = Convert.ToInt32(Console.ReadLine());
                ATM c1 = new ATM();
                switch (n)
                {
                    case 1:
                        balance= c1.deposit(balance);
```

```

        goto first;
        break;
    case 2:
        balance = c1.withdraw(balance);
        goto first;
        break;
    case 3:
        c1.checkBalance(balance);
        break;
    case 4:
        c1.get_info(acc_no, name, balance);
        break;
        default:
            Console.WriteLine("Invalid choice...!please enter valid choice!");
        break;
    }
    goto first;
}
else
{
    Console.WriteLine("Invalid Details...");
}
}
}
class ATM
{
    public int deposit(int balance)
    {
        int temp;
        Console.WriteLine("Enter amount you want to deposit:");
        temp = Convert.ToInt32(Console.ReadLine());
        balance = balance + temp;
        Console.WriteLine("You total balance is:" + balance);
        return balance;
    }
    public int withdraw(int balance)
    {
        int temp;
        Console.WriteLine("Enter amount you want to withdraw:");
        temp = Convert.ToInt32(Console.ReadLine());
        if (temp <= balance)
        {
            balance = balance - temp;
            Console.WriteLine("Your total balance is :" + balance);
        }
        else
        {
            Console.WriteLine("Not sufficient balance");
        }
        return balance;
    }
    public void checkBalance(int balance)
    {
        Console.WriteLine("Your balance is:" + balance);
    }
    public void get_info(int acc_no,String name,int balance)
    {
        Console.WriteLine("Acc_no:" + acc_no);
        Console.WriteLine("Name:"+name);
    }
}

```

```
        Console.WriteLine("Balance:"+balance);  
    }  
}
```

Output :

```
Acc_no:77  
Name:anuj  
Balance:86000  
Hey,anuj  
1.Deposit  
2.Withdraw  
3.Check Balance  
4.Display your information  
Choose your Choice:  
1  
Enter amount you want to deposit:  
77000  
You total balance is:163000  
Hey,anuj  
1.Deposit  
2.Withdraw  
3.Check Balance  
4.Display your information  
Choose your Choice:  
2  
Enter amount you want to withdraw:  
120000  
Your total balance is :43000  
Hey,anuj  
1.Deposit  
2.Withdraw  
3.Check Balance  
4.Display your information  
Choose your Choice:
```

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

Code :

```
using System;

namespace prcat4_2
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("20012011077");
            int count,
            i, j;          int n =
            args.Length;   int[] a =
            new int[100];   int[] b =
            new int[100];   for
            (i=0;i<n;i++)
            {
                a[i] = Convert.ToInt32(args[i]);
            }
            b[i] = 1;
            for (i=0;i<n;i++)
            {
                count
            = 1;          for
            (j=i+1;j<n;j++)
            {
                if (a[i] == a[j])
                {
                    count++;
                    b[j] = 0;
                }
            }
            if (b[i] !=0)
            {
                b[i] = count;
            }
        }
        for (i = 0; i < n; i++)
        {
            if(b[i] != 0)
            {
                Console.WriteLine(a[i] + " Occurs " + b[i] + " Times ");
            }
        }
    }
}
```

Output:

```

20012011077
77 Occurs 2 Times
86 Occurs 2 Times
84 Occurs 1 Times
109 Occurs 1 Times
114 Occurs 1 Times

C:\Users\DELL\source\repos\prac_4\prac_4\bin\Debug\
To automatically close the console when debugging s
le 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.Text; namespace
Practical4_3
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("20012011077");
            StringBuilder s = new StringBuilder("Ram");

            s.Append( " Prasad" );
            Console.WriteLine(" " + s);

            s.Insert(1, " Hey ");
            Console.WriteLine(" " + s);

            s.Remove(1, 10);
            Console.WriteLine(" Remove " + s);

            s.Replace("R", "K");
            Console.WriteLine(" replace " + s);

        }
    }
}

```

Output:

```
20012011077
Ram Prasad
R Hey am Prasad
Remove Rasad
replace Kasad

C:\Users\DELL\source\repos\prac_4\prac_4\bin\Debug\r
Press any key to close this window . . .
```