// Program.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment\_7

{

class Program

{

static void Main(string[] args)

{

String ch;

char ch1;

int ret = 0;

Console.WriteLine("Enter string");

ch = Convert.ToString(Console.ReadLine());

Console.WriteLine("Enter A Single Charcter");

ch1 = Convert.ToChar(Console.ReadLine());

MarvellousString ob = new MarvellousString(ch);

Console.WriteLine("--------------length of String is----------");

ret=ob.strlenx();

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------Count of Capital character is--------");

ret=ob.CountCapital();

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------Count of small character is----------");

ret = ob.CountSmall();

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------frequancy of character is----------");

ret = ob.Frequency(ch1);

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------Count Vowels is----------");

ret = ob.CountVowels();

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------Count space is----------");

ret = ob.CountSpace();

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------first Search character is----------");

ret = ob.SearchFirst(ch1);

Console.WriteLine("{0}", ret);

Console.WriteLine("--------------last Search character is----------");

ret = ob.SearchLast(ch1);

Console.WriteLine("{0}", ret);

}

}

}

//MarvellousString.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Assignment\_7

{

class MarvellousString

{

public string str;

public MarvellousString(string name)

{

str = name;

}

public int strlenx()

{

int icnt = 0;

foreach(char ch in str)

{

icnt = icnt + 1;

}

//Console.WriteLine("{0}",icnt);

return icnt;

}

public int CountCapital()

{

int icnt = 0;

foreach (char ch in str)

{

if (ch >= 'A' && ch <= 'Z')

{

icnt = icnt + 1;

}

}

//Console.WriteLine("{0}", icnt);

return icnt;

}

public int CountSmall()

{

int icnt = 0;

foreach (char ch in str)

{

if (ch >= 'a' && ch <= 'z')

{

icnt = icnt + 1;

}

}

//Console.WriteLine("{0}", icnt);

return icnt;

}

public int Frequency(char ch1)

{

int icnt = 0;

foreach (char ch in str)

{

if (ch ==ch1)

{

icnt++;

}

}

//Console.WriteLine("{0}", icnt);

return icnt;

}

public int CountVowels()

{

int icnt = 0;

foreach (char ch in str)

{

if (( ch == 'a') ||( ch == 'e') || (ch == 'i') ||(ch == 'o') ||( ch == 'u'))

{

icnt ++;

}

}

//Console.WriteLine("{0}", icnt);

return icnt;

}

public int CountSpace()

{

int icnt = 0;

foreach (char ch in str)

{

if (ch == ' ')

{

icnt ++;

}

}

//Console.WriteLine("{0}", icnt);

return icnt;

}

public int SearchFirst(char ch1)

{

int i = 0;

foreach (char ch in str)

{

i++;

if (ch==ch1)

{

break;

}

}

//Console.WriteLine("{0}", i);

return i;

}

public int SearchLast(char ch1)

{

int i = 0;

int j = 0;

foreach ( char ch in str)

{

i++;

if (ch == ch1)

{

j = i;

}

}

return j;

}

/\*

public boolean CheckPalindrome()

{

// Logic

}

\*/

}

}