using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Delegates

{

public class Program

{

static void PrintInfo()

{

Console.WriteLine("Today weather is not so hot");

}

static void UpdateWeatherInfo()

{

Console.WriteLine("Today weather is very hot");

}

static void PrintNumbers(int start, int end)

{

for (int i = start; i < end; i++)

{

Console.WriteLine(i);

}

}

static void CalculateElements(int start, int end)

{

int sum = 0;

for (int i = start; i < end; i++)

{

sum += i;

}

Console.WriteLine($"Sum of elements : {sum}");

}

static void ShowSomeInfo(char gender, int age)

{

if (char.ToLower(gender) == 'm')

{

Console.WriteLine("Your retirement age is 65,you are male");

}

else if (char.ToLower(gender) == 'f')

{

Console.WriteLine("Your retirement age is 60, your are female");

}

}

static int Add(int num1, int num2)

{

return num1 + num2;

}

static int Mult(int num1, int num2)

{

return num1 \* num2;

}

static int Subt(int num1, int num2)

{

return num1 - num2;

}

static string CombineInfo(string name, int age)

{

return name + " " + age;

}

static int GetCurrentYear()

{

return DateTime.Now.Year;

}

static bool EvenNumber(int num)

{

return num % 2 == 0;

}

static bool Compare(int num1,int num2)

{

return num1 > num2;

}

static bool IsVowel(char symbol)

{

return Array.IndexOf("aeuio".ToArray(), symbol) > -1;

}

static void Main(string[] args)

{

int[] numbers = { 111, 2, 3, 24, 5, 6, 7, 83, 9, -10, 11, -12, 13, 14 };

string text = "Salam millet necesiniz ?";

var charArray = text.ToCharArray();

Predicate<char> vowelPredicate = new Predicate<char>(IsVowel);

//Predicate<int> evenPredicate = new Predicate<int>(EvenNumber);

//evenPredicate += (num) =>

//{

// return num > 10;

//};

var vowels=Array.FindAll(charArray, vowelPredicate);

foreach (var item in vowels)

{

Console.WriteLine(item);

}

// var evens = Array.FindAll(numbers, evenPredicate);

//foreach (var item in evens)

//{

// Console.WriteLine(item);

//}

//Action Func Predicate

//Action action = new Action(PrintInfo);

//action += UpdateWeatherInfo;

//action.Invoke();

//Action<int,int>action=new Action<int, int>(PrintNumbers);

//action += CalculateElements;

//action.Invoke(10, 20);

//Action<char, int> action = new Action<char, int>(ShowSomeInfo);

//action.Invoke('m',23);

//Func<int, int, int> myfunc = new Func<int, int, int>(Subt);

//myfunc += Add;

//myfunc += Mult;

//Console.WriteLine(myfunc.Invoke(10, 20));

//Func<int> func = new Func<int>(GetCurrentYear);

//var result=func();

//Console.WriteLine(result);

//var mydel = new Func<string, int, string>(CombineInfo);

//var result=mydel.Invoke("Elvin", 23);

//Console.WriteLine(result);

}

}

}