**I nedelja**

namespace Oktobar11

{

internal class Program

{

static void Main(string[] args)

{

/\*

Console.Write("Vase ime:");

string ime = Console.ReadLine();

Console.WriteLine("Zdravo " + ime);

\*/

bool polozio = true; //ovo je logicki tip promenljive

char slovo = 'a'; //promenljiva tipa karakter, mora pod apostrofom da bude

/\* komentar u vise redova

\* slede promenljive tipa integer

\*

\*

\*/

/\*

int maxInt=int.MaxValue;

int minInt=int.MinValue;

long maxLong=long.MaxValue;

decimal maxDec=decimal.MaxValue;

Console.WriteLine("MaxInt: " + maxInt);

Console.WriteLine("MinInt: "+minInt);

Console.WriteLine("MaxLong: " + maxLong);

Console.WriteLine("MaxDec: " + maxDec);

float maxFloat =float.MaxValue; //max 7 decimalnih mesta

double maxDouble=double.MaxValue; //15 decimalnih mesta

Console.WriteLine("MaxFloat: "+maxFloat);

Console.WriteLine("MaxDouble: " + maxDouble);

var nekoIme = "VTS";

Console.WriteLine("Zdravo " + nekoIme);

var prosek = 2.35;

Console.WriteLine("zdravo {0}", nekoIme);

Console.WriteLine("MaxFloat je {0}, a maxDouble je {1}", maxFloat, maxDouble);

\*/

//--------MATH-------------

/\*

Console.WriteLine("5+3=" + (5 + 3));

Console.WriteLine("5-3=" + (5 - 3));

Console.WriteLine("5\*3=" + (5 \* 3));

Console.WriteLine("5/3=" + (5 / 3));

Console.WriteLine("5.2%3=" + (5.2 % 3));

int i= 0;

Console.WriteLine("i++=" + (i++));

Console.WriteLine("++i=" + (++i));

Console.WriteLine("i--=" + (i--));

Console.WriteLine("--i=" + (--i));

Console.WriteLine("i+=3 " + (i += 3)); //i=i+3

Console.WriteLine("i-=3 " + (i -= 3)); //i=i-3

Console.WriteLine("i\*=2 " + (i \*= 2)); //i=i\*2

Console.WriteLine("i/=2 " + (i /= 2)); //i=i/2

Console.WriteLine("i%=2 " + (i %= 2)); //i=i%2

//kastovanje

double pi = 3.14;

int intPi=(int)pi;

//math funkcije

double num1 = 10.25;

double num2 = 10;

Console.WriteLine("Math.Abs(num1) "+(Math.Abs(num1)));

Console.WriteLine("Math.Ceiling(num1) "+(Math.Ceiling(num1)));

Console.WriteLine("Math.Floor(num1) " + (Math.Floor(num1)));

Console.WriteLine("Math.Max(num1,num2) " + ( Math.Max(num1,num2) ));

Console.WriteLine("Math.Min(num1,num2) " + (Math.Min(num1, num2)));

Console.WriteLine("Math.Pow(num2,3) " + (Math.Pow(num2, 3)));

Console.WriteLine("Math.Pow(num2,1./3) " + (Math.Pow(num2, 0.33)));

Console.WriteLine("Math.Sqrt(num2) " + ( Math.Sqrt(num2)));

Random random= new Random();

Console.WriteLine("Slucajan broj izmedju 1 i 100 " + (random.Next(1,101)));

\*/

//------IF-----

//relacioni operatori: > < >= <= == !=

//logicki operatori: && || ^ !

/\*

int godine = 21;

if ( (godine>=2) && (godine<7) )

{

Console.WriteLine("ide u vrtic");

}

else if ( (godine>7) && (godine<15 ))

{

Console.WriteLine("osnovna skola");

}

else if ((godine > 15) && (godine < 18))

{

Console.WriteLine("srednja skola");

}

else

{

Console.WriteLine("fakultet");

}

//ternarni operator

bool fakultet=godine>=18 ? true : false;

//switch

switch(godine)

{

case 0:

Console.WriteLine("vrtic");

break;

case 1:

Console.WriteLine("osnovna skola");

break;

case 2:

Console.WriteLine("srednja skola");

break;

default:

Console.WriteLine("fakultet");

break;

}

\*/

//----------String------------

/\*

string recenica = "danas je petak 13.oktobar petak";

string recenica1 = " danas je petak 13. oktobar petak ";

Console.WriteLine("Da li je string prazan " + String.IsNullOrEmpty(recenica));

Console.WriteLine("Da li je prazan ili ima razmaka " + String.IsNullOrWhiteSpace(recenica1));

Console.WriteLine("Duzina stringa " + recenica.Length);

Console.WriteLine("Index petka: " + recenica.IndexOf("petak"));

Console.WriteLine("13.oktobar: " + recenica.Substring(15, 10));

Console.WriteLine("Jednakost stringova: " + recenica.Equals(recenica1));

Console.WriteLine("Duzina stringa " + recenica1.Length);

Console.WriteLine(recenica1);

string recenica2 = recenica1.Trim();

Console.WriteLine("Duzina stringa " + recenica2.Length);

Console.WriteLine(recenica2);

recenica2 = recenica1.Replace("danas", "Danas");

Console.WriteLine(recenica2);

recenica2 = recenica1.Remove(15, 3);

Console.WriteLine(recenica2);

\*/

//----------Nizovi---------

/\*

int[] niz; //deklaracija niza

int[] niz1 = new int[5]; //deklarisemo niz i koliko elemeneta moze da ima

int[] niz2 = {1,2,3,4,5}; //deklarisanje i inicijalizacija niza

Console.WriteLine("Duzina niza: " + niz1.Length);

Console.WriteLine("element niza na poziciji 3: " + niz2[2]);

for(int i=0; i<niz2.Length; i++)

{

Console.Write(niz2[i]+" ");

}

Console.WriteLine();

foreach(int br in niz2)

{

Console.WriteLine(br);

}

string[] imena = { "Mia", "Tea", "Una", "Relja", "Petar", "Toni" };

string imenaStr=string.Join(",", imena);

Console.WriteLine(imenaStr);

string recenica = "danas je petak 13.oktobar petak";

string[] imenaArray=recenica.Split(" ");

foreach(string str in imenaArray)

{

Console.WriteLine(str);

}

\*/

/\*

//-----------LISTE--------

List<int> list = new List<int>();

list.Add(1);

list.Add(12);

list.Add(25);

int[] niz = { 1, 8, 9, 10, 15, 125 };

list.AddRange(niz);

//list.Sort();

list.Insert(0, -3);

list.Remove(15); //vrednost koju izbacujemo

list.RemoveAt(5); //index sa kog izbacujemo

foreach(int n in list)

{

Console.WriteLine(n);

}

Console.WriteLine("10 je na indexu " + list.IndexOf(10));

Console.WriteLine("100 da li je u listi: " + list.Contains(100));

Console.WriteLine("Koliko elemenata je u listi "+list.Count);

\*/

//------Obrada izuzetaka--------

try

{

Console.WriteLine("Podeli 10 sa ");

int num = int.Parse(Console.ReadLine());

Console.WriteLine("10/{0}={1}", num, (10 / num));

}

catch(Exception ex)

{

Console.WriteLine(ex.GetType().Name);

Console.WriteLine(ex.Message);

}

}

}

}

**II nedelja**

using System.Text;

namespace ConsoleApp4

{

internal class Program

{

static void Main(string[] args)

{

string[] studenti = { "student1", "student2" };

var studentIndex = new[] { "12314", "23654", "4587" };

var studentOcene = new[] { 10, 9, 8, 6 };

object[] randomNiz = { "student1", 25.36, 10 };

Console.WriteLine("randomNiz 0: {0}", randomNiz[0].GetType());

string[,] imena = new string[2, 2] { { "Petar", "Milana" }, { "Veljko", "Pavle" } };

Console.WriteLine("Element matrice: {0}", imena.GetValue(1,1));

/\*

for(int i=0; i<imena.GetLength(0); i++)

{

for(int j=0; j<imena.GetLength(1); j++)

{

Console.Write(imena[i, j]+" ");

}

}

int[] brojevi = { 1, 10, 8, 3, 12, 0 };

Array.Sort(brojevi);

foreach(int i in brojevi)

{

Console.WriteLine(i);

}

Console.WriteLine();

Array.Reverse(brojevi);

foreach (int i in brojevi)

{

Console.WriteLine(i);

}

brojevi.SetValue(100, 1);

foreach (int i in brojevi)

{

Console.WriteLine(i);

}

StringBuilder sb=new StringBuilder("novi sadrzaj");

StringBuilder sb1 = new StringBuilder("neki malo duzi tekst");

Console.WriteLine("Kapacitet: "+sb1.Capacity);

sb1.Append(", jos malo nekog teksta");

Console.WriteLine(sb1.ToString());

sb1.Replace("tekst", "text");

Console.WriteLine(sb1.ToString());

sb1.Clear();

Console.WriteLine(sb1.ToString());

sb1.Append(" novi sadrzaj ");

Console.WriteLine(sb.Equals(sb1));

sb1.Insert(5, "VTS");

Console.WriteLine(sb1.ToString());

sb1.Remove(5,3); Console.WriteLine(sb1.ToString());

Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*\*");

PrintArray(brojevi, "element:");

\*/

//oderediti duzinu stringa bez length

string str = "Visoka tehnicka skola Subotica";

int d = 0;

foreach(char ch in str)

{

d++;

}

Console.WriteLine("Duzina stringa je: {0}", d);

int l = 0;

while (l <= str.Length - 1)

{

Console.WriteLine(str[l]);

l++;

}

//ispis od kraja ka pocetku

int m=str.Length - 1;

while (m >= 0)

{

Console.WriteLine(str[m]);

m--;

}

}

static void PrintArray(int[] array, string mess)

{

foreach(int i in array) {

Console.WriteLine(mess+i);

}

}

}

}

**III nedelja**

using System.Collections;

namespace ConsoleApp\_20oktobar

{

internal class Program

{

static void Main(string[] args)

{

/\*

ArrayList aList = new ArrayList();

aList.Add(1);

aList.Add("vts");

aList.Add(2.35);

Console.WriteLine("Broj elemenata: "+aList.Count);

Console.WriteLine("Kapacitet: " + aList.Capacity);

aList.Add(2.35);

aList.Add(2.35);

aList.Add(2.35);

Console.WriteLine("Kapacitet: " + aList.Capacity);

//aList.Sort(); //podaci moraju da budu istog tipa

ArrayList aList1 = new ArrayList();

aList1.Add(1);

aList1.Add(8);

aList1.Add(5);

aList1.Sort();

foreach(int i in aList1)

{

Console.WriteLine(i);

}

aList1.Reverse();

foreach (int i in aList1)

{

Console.WriteLine(i);

}

aList1.Insert(0, 10);

Console.WriteLine("\*\*\*\*\*\*");

foreach (int i in aList1)

{

Console.WriteLine(i);

}

Console.WriteLine("\*\*\*\*\*\*");

ArrayList range = aList1.GetRange(0, 2);

foreach (int i in range)

{

Console.WriteLine(i);

}

aList1.RemoveRange(1, 3);

Console.WriteLine("\*\*\*\*\*\*");

foreach (int i in aList1)

{

Console.WriteLine(i);

}

Console.WriteLine("\*\*\*\*\*\*Sadrzaj arayList");

foreach (var i in aList)

{

Console.WriteLine(i);

}

aList.RemoveAt(1);

Console.WriteLine("NAkon izbacivanja sa odredjene pozicije");

foreach (var i in aList)

{

Console.WriteLine(i);

}

\*/

//Queue FIFO

/\*

Queue<string> queue = new Queue<string>();

queue.Enqueue("a");

queue.Enqueue("b");

queue.Enqueue("c");

queue.Enqueue("d");

Console.WriteLine("Broj elemenata u redu: "+queue.Count);

Console.WriteLine("Da li je sadrzan u redu: "+queue.Contains("b"));

Console.WriteLine("Peek :"+queue.Peek());

Console.WriteLine("Uklanjamo iz reda: "+queue.Dequeue());

Console.WriteLine("Peek :" + queue.Peek());

foreach (string item in queue)

{

Console.WriteLine("elementi reda:" + item);

}

queue.Clear();

\*/

/\*

//STACK LIFO

Stack<int> stack = new Stack<int>();

stack.Push(1);

stack.Push(2);

stack.Push(30);

stack.Push(5);

Console.WriteLine("Peek: "+stack.Peek());

Console.WriteLine("Da li ga ima na steku: "+stack.Contains(1));

Console.WriteLine("Skidanje sa steka: "+stack.Pop());

Console.WriteLine("Peek: " + stack.Peek());

foreach(object o in stack)

{

Console.WriteLine(o.ToString());

//ToString je neophodan jer koristimo object

}

stack.Clear();

\*/

/\*

//DICTIONARY

Dictionary<string, string> student = new Dictionary<string, string>();

student.Add("26122082", "Nenad");

student.Add("26122083", "Mihajlo");

student.Add("26122038", "Milana");

student.Add("26222004", "Mila");

student.Add("26222001", "Mila");

student.Remove("26222001");//brisemo preko kljuca

Console.WriteLine("Broj clanova: "+student.Count);

//da li je odredjeni kljuc clan dictionary-ja

Console.WriteLine("1220365 prisutan:" + student.ContainsKey("1220365"));

Console.WriteLine("26122038 prisutan:" + student.ContainsKey("26122038"));

foreach(KeyValuePair<string,string> kvp in student)

{

Console.WriteLine("{0}:{1}", kvp.Key, kvp.Value);

}

Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*");

foreach (KeyValuePair<string, string> kvp in student)

{

Console.WriteLine("broj indeksa:"+ kvp.Key+" student:"+kvp.Value);

}

student.Clear();

\*/

//Primer primene

string str = "Nasa Skola, osnovana je 1960. godine i predstavlja jednu od najcenjenijih drzavnih visokoskolskih ustanova u Srbiji. ";

Console.WriteLine(str);

//preborjati koliko puta se javlja slovo 'a'

int countA = 0;

foreach(char c in str)

{

if(c== 'a')

{

countA++;

}

}

Console.WriteLine("Slovo a se javlja: "+countA);

//na kojim indeksima u stringu se javlja 'na'

string keyword = "na";

int index=str.IndexOf(keyword);

while(index>=0)

{

Console.WriteLine("index: " + index);

index= str.IndexOf(keyword, index+keyword.Length);

}

//prebaci sve u velika/mala slova

string str1=str.ToUpper();

Console.WriteLine(str1);

string keyword1 = "NA";

int index1 = str1.IndexOf(keyword1);

while (index1 >= 0)

{

Console.WriteLine("index: " + index1);

index1 = str1.IndexOf(keyword1, index1 + keyword1.Length);

}

//spajanje 2 stringa

string str2 = "Obrazovni sistem nase ustanove, koji se temelji na obrazovanju orijentisanom ka praksi primenom najsavremenijih naucnih i tehnicko-tehnoloskih dostignuca";

string str3 = str + str2;

Console.WriteLine(str3);

//izdvajanje podstringa iz stringa

string str4 = str3.Substring(0, 20);

Console.WriteLine(str4);

//napraviti listu koji sadrzi reci "oop", "oet", "java", "php", "c#"

string[] niz = new string[3] {"oop", "oet", "java"};

List<string> list = new List<string>();

//list.Add("oop"); itd

list=niz.ToList();

foreach(var s in list)

{

Console.WriteLine(s+" ");

}

Console.WriteLine("Ispis obrnute liste");

list.Reverse();

foreach (var s in list)

{

Console.WriteLine(s + " ");

}

//napraviti stek

Stack<string> stack = new Stack<string>();

stack.Push("oop");

stack.Push("oet");

stack.Push("java");

stack.Push("c#");

Console.WriteLine("Ispis steka:");

foreach(string s in stack)

{

Console.Write(s+",");

}

}

}

}