

C#

Nizovi i enumeracije

Nizovi

- Jednodimenzioni
- Višedimenzioni
- Reckavi (jagged arrays)

Jednodimenzioni nizovi

```
int[] myArray = new int [5];
int[] myArray = new int[] {1, 3, 5, 7, 9};
Int[] myArray = {1, 3, 5, 7, 9};

PRIMER

static void PrintArray(string[] w)
{
    for (int i = 0 ; i < w.Length ; i++)
        Console.Write(w[i] + "{0}", i < w.Length - 1 ? " " : "");
    Console.WriteLine();
}

public static void Main()
{
    string[] WeekDays = new string []
        {"Sun", "Sat", "Mon", "Tue", "Wed", "Thu", "Fri"};
    PrintArray(WeekDays);
}
```

Višedimenzioni nizovi

```
int[,] myArray = new int[4,2];
int[, ,] myArray = new int [4,2,3];

int[,] myArray = new int[,] {{1,2}, {3,4}, {5,6}, {7,8}};
int[,] myArray = {{1,2}, {3,4}, {5,6}, {7,8}};

static void PrintArray(int[,] w)
{
    for (int i=0; i < 4; i++)
        for (int j=0; j < 2; j++)
            Console.WriteLine("Element({0},{1})={2}", i, j, w[i,j]);
}

public static void Main()
{
    int[,] a = {{1,2}, {3,4}, {5,6}, {7,8}}
    PrintArray(a);
}
```

Reckavi nizovi

```
int[][][] myJaggedArray = new int[3][];  
myJaggedArray[0] = new int[5];  
myJaggedArray[1] = new int[4];  
myJaggedArray[2] = new int[2];  
  
myJaggedArray[2][1] = 44;  
  
int[][][] myJaggedArray = new int [][][]  
{  
    new int[] {1,3,5,7,9},  
    new int[] {0,2,4,6},  
    new int[] {11,22}  
};  
  
int[][][] myJaggedArray = {  
    new int[] {1,3,5,7,9},  
    new int[] {0,2,4,6},  
    new int[] {11,22}  
};
```

Reckavi nizovi

```
public static void Main()
{
    int[][] myArray = new int[2][];

    // Initialize the elements:
    myArray[0] = new int[5] {1,3,5,7,9};
    myArray[1] = new int[4] {2,4,6,8};

    for (int i=0; i < myArray.Length; i++)
    {
        Console.Write("Element({0}): ", i);

        for (int j = 0 ; j < myArray[i].Length ; j++)
            Console.Write("{0}{1}", myArray[i][j],
                          j == (myArray[i].Length-1) ? "" : " ");

        Console.WriteLine();
    }
}
```

foreach petlja

```
int[] numbers = {4, 5, 6, 1, 2, 3, -2, -1, 0};

foreach (int i in numbers)
{
    System.Console.WriteLine(i);
}
```

ZADATAK

Ispisati sadržaj nekavog niza.

foreach petlja

ZADATAK

Ispisati sadržaj rekavog niza.

```
int[][] numbers2 = {
    new int[] { 9 },
    new int[] { 3, 33 },
    new int[] { 5, 55 }
};

foreach (int[] nizz in numbers2)
{
    foreach (int i in nizz)
        Console.WriteLine("{0} ", i);
}
```

Enumeracije

```
class Program
{
    enum E { None,BoldTag,ItalicsTag,HyperlinkTag,};

    static void Main()
    {
        E en1 = E.BoldTag;
        E en2 = E.ItalicsTag;

        if (en1 == E.BoldTag) { Console.WriteLine("Bold"); }
        if (en1 == E.HyperlinkTag) { Console.WriteLine("Not true"); }
    }
}
```

Enumeracije

```
class Program
{
    enum Boje { crvena, pava, bela}

    static void Main()
    {
        for (Boje b=0; b <= Boje.bela; b++) Console.WriteLine(b);
    }
}
```

Enumeracije

```
public enum Colors
{
    red,
    blue,
    green,
    yellow
}

private void button1_Click(object sender, EventArgs e)
{
    string inVal = "green";
    Colors newColor = (Colors)Enum.Parse(typeof(Colors), inVal);

    //Check the Enum type
    if (newColor == Colors.green)
    {
        MessageBox.Show(newColor.ToString());
    }
    ...
}
```