using System;

using System.Linq;

class Program

{

static void Main()

{

// Pieprasām lietotājam ievadīt vārdu un to nolasām

Console.Write("Ievadi vārdu: ");

string name = Console.ReadLine();

// Pieprasām lietotājam ievadīt uzvārdu un to nolasām

Console.Write("Ievadi uzvārdu: ");

string surname = Console.ReadLine();

// Izsaucam TabulasDati funkciju, lai iegūtu 2D masīvu ar gadījuma skaitļiem

int[,] data = TabulasDati(name, surname);

// Izdrukājam tabulas galvu, izmantojot vārdu

TabulasGalva(name);

// Izdrukājam sākotnējo tabulu

Tabula(data);

// Izdrukājam atstarpes starp tabulām

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

// Izsaucam funkciju, kas apmaina rindas ar kolonnām

int[,] revData = TabulasMaina(data);

// Izdrukājam tabulas galvu transformētai tabulai, izmantojot uzvārdu

TabulasGalva(surname);

// Izdrukājam transformēto tabulu

Tabula(revData);

}

// Visas pārējās metodes no tava koda šeit tiek iekļautas zem šīs pašas klases:

static void TabulasLinija(int lineAmount, int amount)

{

for (int i = 0; i < amount; i++)

{

Console.Write("\*");

for (int j = 0; j < lineAmount; j++)

{

Console.Write("-");

}

}

Console.WriteLine("\*");

}

static void TabulasRinda(int[] rowData, int max, int min, int sum)

{

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

{

if (rowData[i] < 10)

{

Console.Write($"| {rowData[i]} ");

}

else

{

Console.Write($"| {rowData[i]} ");

}

}

if (max < 10) Console.Write($"| {max} ");

else Console.Write($"| {max} ");

if (min < 10) Console.Write($"| {min} ");

else Console.Write($"| {min} ");

if (sum < 10) Console.Write($"| {sum} ");

else if (sum > 99) Console.Write($"| {sum} ");

else Console.Write($"| {sum} ");

Console.WriteLine("|");

}

static int[,] TabulasDati(string name, string surname)

{

Random rnd = new Random();

int minValue = name.Length;

int maxValue = surname.Length;

int[,] data = new int[maxValue, minValue];

for (int i = 0; i < maxValue; i++)

{

for (int j = 0; j < minValue; j++)

{

data[i, j] = rnd.Next(minValue, minValue + maxValue);

}

}

return data;

}

static void TabulasGalva(string name)

{

TabulasLinija(5, name.Length + 3);

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

{

Console.Write($"| {name.Substring(i, 1)} ");

}

Console.Write($"| max ");

Console.Write($"| min ");

Console.Write($"| sum ");

Console.WriteLine("|");

}

static void Tabula(int[,] data)

{

int rowLength = data.GetLength(0);

int[] rowData = new int[data.GetLength(1)];

for (int i = 0; i < rowLength; i++)

{

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

{

rowData[j] = data[i, j];

}

int max = rowData.Max();

int min = rowData.Min();

int sum = rowData.Sum();

TabulasLinija(5, rowData.Length + 3);

TabulasRinda(rowData, max, min, sum);

}

TabulasLinija(5, rowData.Length + 3);

}

static int[,] TabulasMaina(int[,] data)

{

int rowLength = data.GetLength(0);

int colLenght = data.GetLength(1);

int[,] revData = new int[colLenght, rowLength];

for (int i = 0; i < rowLength; i++)

{

for (int j = 0; j < colLenght; j++)

{

revData[j, i] = data[i, j];

}

}

return revData;

}

}