

Lab 5 11.09

Program code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.IO;

namespace siit
{
    class Program
    {
        static void Main(string[] args)
        {
            var average = new List<int>();
            Random rnd = new Random();
            for (int i = 2; i <= 20; i++)
            {
                var test = new List<int>();

                for (int j = 0; j < i; j++)
                {
                    test.Add(rnd.Next() % 2);
                }
                for (int z = 0; ; z++)
                {
                    bool p = true;
                    var x = new List<int>();
                    for (int j = 0; j < i; j++)
                    {
                        x.Add(rnd.Next() % 2);
                    }
                    for (int j = 0; j < i; j++)
                    {
                        if (test[j] != x[j])
                        {
                            p = false;
                            break;
                        }
                    }
                    if (p)
                    {
                        average.Add(z);
                        break;
                    }
                }
            }
            for (int i = 0; i < average.Count; i++)
            {
                Console.WriteLine(average[i]);
                wrtite.WriteLine(average[i]);
            }
            wrtite.Close();
            Console.ReadKey();
        }
    }
}
```

Result:

Step	Result
1	1
2	3
3	4
4	6
5	7
6	8
7	14
8	44
9	120
10	520
11	1334
12	1649
13	2964
14	8360
15	15292
16	24295
17	35887
18	75193
19	120625
20	259824

Graphs:



