Stopwatch sw = Stopwatch.StartNew();

int n = 1000000 - 1,

    factorial = 9 \* 8 \* 7 \* 6 \* 5 \* 4 \* 3 \* 2 \* 1;

int[] factoid = new int[10];

for (int i = 9; i > 0; i--)

{

    factoid[i] = n / factorial;

    n %= factorial;

    factorial /= i;

}

for (int i = 1; i < 10; i++)

{

    for (int j = i - 1; j >= 0; j--)

    {

        if (factoid[j] >= factoid[i]) factoid[j]++;

    }

}

sw.Stop();

for (int i = 9; i >= 0; i--)

{

    Console.Write(factoid[i]);

}

Console.WriteLine();

Console.WriteLine(sw.Elapsed);

Console.ReadLine();

Ответ:2783915460