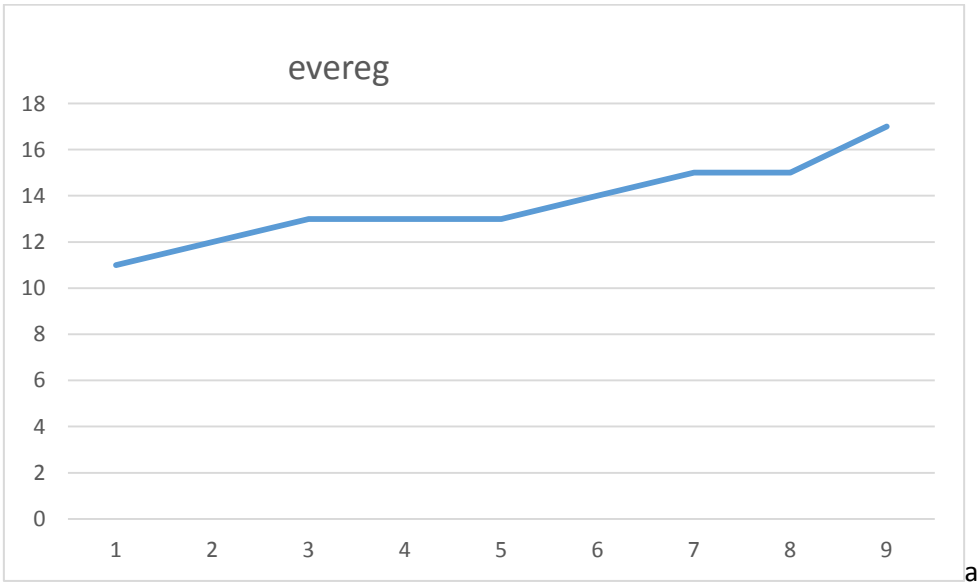
```
#include <iostream>
#include <time.h>
#include <fstream>
using namespace std;
void main()
{
	srand(time(NULL));
	bool t[101][20], l[50][20];
	int i, y, k, kp = 0, f, s, c = 0, cr;
	for (i = 0; i < 101; i++)
	for (y = 0; y < 20; y++)
		t[i][y] = rand() % 2;
	ofstream g("E:\tt.txt", ios::in | ios::out|ios::trunc);
	do
	{
		c++;
		for (i = 1; i < 100; i++)
		if (t[i - 1] == t[i])
			k ++;
		for (kp = 0, y = 0; y < 20; y++)
		if (t[0][y])
			kp++;
		for (int u = 1; u< 100; u++)
		for (i = 1; i < 100; i++)
			{
			if (kp == 20 && k==99){
				cout << "ideal complete!!\n";
				exit(0);
			}
				for (k = 0, y = 0; y < 20; y++)
				if (t[i][y])
					k++;
				if (k>kp)
				{
					for (y = 0; y < 20; y++)
					{
						l[0][y] = t[i][y];
						t[i][y] = t[i - 1][y];
						t[i - 1][y] = l[0][y];
					}
				}
				kp = k;
			}
		for (i = 0; i < 50; i++)
		{
			f = rand() % 100;
			s = rand() % 100;
			for (y = 0; y < 20; y++)
			if (t[100][y])
				l[i][y] = t[f][y];
			else
				l[i][y] = t[s][y];
		}
		for (i = 0; i < 50; i++){
			for (y = 0; y < 20; y++){
				t[i + 50][y] = l[i][y];
			}
		}
		for (i = 0; i < 100; i++){
			for (y = 0; y < 20; y++){
				k+=t[i][y];
			}

		}
		g.close();
```

```
            for (kp = 0, y = 0; y < 20; y++)
            {
                  if (t[0][y])
                        kp++;
            }cout << kp << endl<<k/100 << "----------------------------------------
-------------" << endl;
            g << k;
      }
      while (c!=9);
}
```



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