

1-Jadval.11-misol.a

11

- a) Berilgan sonni factorialini hisoblaydigan funksiya yarating. Ushbu funksiya yordamida a,b,c funksiyalarini factorialini hosil qiling.
- b) Palindrom funksiyasini hosil qiling. Ushbu funksiya yordamida a,b,c sonlarini palindromlikka tekshiring

```
#include <iostream>
#include <cmath>
using namespace std;

double HandMadeFactorial(double a) {
    // Gamma usuli bilan hisoblash
    double res = sqrt(2*M_PI*a)*pow(a/M_E,a);
    return res;
}

double BuiltInFactorial(double a) {
    return tgamma(a + 1);
}

int SimpleFactorial(int a) {
    if(a <= 1) return 1;
    return a * SimpleFactorial(a - 1);
}

int main() {
    double a,b,c;
    cin >> a >> b >> c;
    cout << HandMadeFactorial(a)<<endl;
    cout << BuiltInFactorial(b)<<endl;
    cout << SimpleFactorial(c)<<endl;

    return 0;
}
```

1-Jadval.11-misol.b

11

- a) Berilgan sonni factorialini hisoblaydigan funksiya yarating. Ushbu funksiya yordamida a,b,c funksiyalarini factorialini hosil qiling.
- b) Palindrom funksiyasini hosil qiling. Ushbu funksiya yordamida a,b,c sonlarini palindromlikka tekshiring

```
#include <iostream>
using namespace std;

bool isPalindrom(string s) {
    int len = s.length();
    for(int i = 0;i<len/2;i++) {
        if(s[i] != s[len-i-1]) {
            return false;
        }
    }
    return true;
}

int main() {
    string a,b,c;
    cin >> a >> b >> c;
    cout << (isPalindrom(a) ? "Ha" : "Yo'q") << endl;
    cout << (isPalindrom(b) ? "Ha" : "Yo'q") << endl;
    cout << (isPalindrom(c) ? "Ha" : "Yo'q") << endl;

    return 0;
}
```

2-Jadval.11-misol

11

n ta elementdan tashkil topgan massiv berilgan. Bu massivning eng katta va eng kichik elementlari yig'indisi hisoblansin. ()

```
#include <iostream>
using namespace std;

int main() {
    int n,a[1000];
    cin >> n;
    for (int i = 0;i<n;i++) {
        cin >> a[i];
    }

    int min=a[0];
    int max=a[0];
    for(int i = 1;i<n;i++) {
        if(a[i] < min) min = a[i];
        if(a[i] > max) max = a[i];
    }

    cout<<min+max;

    return 0;
}
```

3-Jadval.11-misol

11. Elementlari bir-biriga teng bo‘lmasan haqiqiy turdagи 7- tartibli kvadrat matritsa berilgan. Eng katta elementi joylashgan satrning eng kichik elementi joylashgan ustunga ko‘paytmasi topilsin.

```
#include <iostream>
using namespace std;

int main() {
    int q,a[1000][1000];
    cout << "Kvadrat matritsa uchun qatorlar va ustunlar soni: ";
    cin >> q;
    for(int i = 0;i<q;i++) {
        for(int j = 0;j<q;j++) {
            cin >> a[i][j];
        }
    }

    int maxQ = a[0][0];
    int minU = a[0][0];
    int numQ=0,numU=0;
    for(int i = 0;i<q;i++) {
        for(int j = 0;j<q;j++) {
            if(a[i][j] > maxQ) {maxQ = a[i][j];numQ = i;}
            if(a[i][j] < minU) {minU = a[i][j];numU = j;}
        }
    }

    int res[1000];
    for(int i = 0;i<q;i++) {
        res[i] = a[numQ][i] * a[i][numU];
    }

    for(int i = 0;i<q;i++) {
        cout << res[i] << " ";
    }
    return 0;
}
```