## Танирбергенов Ерасыл ПО 22-1

## Цикл "for"

```
[] 6
                                                  Run
                                                             Output
main.cpp
1 //Факториал
                                                            /tmp/thqqAdsAxz.o
2 #include <iostream>
                                                            3
3 using namespace std;
                                                            6
4 - int main() {
5
      int n, a = 1;
                                                            === Code Execution Successful ===
6
      cin >> n;
7 -
      for (int i = 1; i<=n; i++) {
8
          a*=i;
9
       }
10
       cout << a << endl;</pre>
11 return 0;
12 }
                                        [] 6
                                                              Output
                                                    Run
main.cpp
 1 //Степень
                                                            /tmp/JCbghrD2cd.o
 2 #include <iostream>
 3 using namespace std;
                                                            16
 4 - int main() {
 5
      int n, a = 1;
      cin >> n;
                                                            === Code Execution Successful ===
 6
 7 -
      for (int i = 0; i<n; i++) {
 8
          a*=2;
 9
       }
       cout << a << endl;</pre>
10
11 return 0;
12 }
                                        [] 6
                                                   Run
                                                              Output
main.cpp
                                                             /tmp/qSWyOfk74v.o
1 //Сумма квадратов
 2 #include <iostream>
                                                             2
 3 using namespace std;
                                                             5
 4 - int main() {
       int n, a = 0;
      cin >> n;
                                                             === Code Execution Successful ===
 6
 7 -
      for (int i; i<=n; i++) {
       a = a+i*i;
 9
       cout << a << endl;</pre>
10
11
       return 0;
12 }
13
```

```
[] 6
                                                     Run
                                                               Output
 main.cpp
1 //Число сочетаний
                                                              /tmp/bz9YFbE7wB.o
 2 #include <iostream>
                                                              2 1
 3 using namespace std;
                                                              2
 4 - int main() {
       int n, k, a = 1, b = 1, x;
                                                              === Code Execution Successful ===
 6
       cin >> n >> k;
 7 -
      for (int i = 1; i<=n; i++) {
 8
         a*=i;
 9
      }
10 -
      for (int i = 1; i<=k; i++) {
11
      b*=i;
12
13
      x = n - k;
14 -
       for (int i = 1; i<=x; i++) {
15
       x*=i;
16
       cout << a / b * x << endl;
17
18
       return 0;
19 }
```

