

C++ 01.cpp > main()

```
1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int start, end;
6      cin>>start>>end;
7      while(start <= end)
8      {
9          cout<<start<<"\n";
10         start++;
11     }
12     return 0;
13 }
14
15
```

```
1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int num;
6      char ch;
7
8      cin>>num>>ch;
9
10     while(num > 0)
11     {
12         cout<<ch;
13         num -= 1;
14     }
15     return 0;
16 }
```

C++ 01.cpp > ...

```
1  #include<iostream>
2  using namespace std;
3
4  int main() {
5      int N;
6      cin >> N;
7      int row = 1;
8      while (row <= N) {
9          int stars_count = 1;
10
11          while (stars_count <= row) {
12              cout << '*';
13              ++stars_count;
14          }
15          cout << "\n";
16          row++;
17      }
18      return 0;
19  }
```

```
1
2  #include<iostream>
3  using namespace std;
4
5  int main() {
6      int N;
7      cin >> N;
8      int row = N;
9      while (row > 0) {
10         int stars_count = 1;
11
12         while (stars_count <= row) {
13             cout << '*';
14             ++stars_count;
15         }
16         cout << "\n";
17         row--;
18     }
19     return 0;
20 }
21
22
```

```
1
2  #include<iostream>
3  using namespace std;
4
5  int main() {
6      int N;
7
8      cin >> N;
9      int row = 1;
10     while (row <= N) {
11         int stars_count = 1;
12
13         while (stars_count <= N-row) {
14             cout << ' ';
15             ++stars_count;
16         }
17
18         stars_count = 1;
19         while (stars_count <= 2*row-1) {
20             cout << '*';
21             ++stars_count;
22         }
23         cout << "\n";
24         ++row;
25     }
26     row = N;
27     while (row >= 1) {
28         int stars_count = 1;
29
30         while (stars count <= N-row) {
```

```

5     }
6     row = N;
7     while (row >= 1) {
8         int stars_count = 1;
9
10        while (stars_count <= N-row) {
11            cout << ' ';
12            ++stars_count;
13        }
14
15        stars_count = 1;
16
17        while (stars_count <= 2*row-1) {
18            cout << '*';
19            ++stars_count;
20        }
21        cout << "\n";
22        --row;
23    }
24    return 0;
25 }

```

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

```
int main() {
    int N;
    cin >> N;
    double even_sum = 0, odd_sum = 0;
    int even_count = 0, odd_count = 0;

    int cnt = 1;
    while (cnt <= N) {
        double value;
        cin >> value;

        if (cnt % 2 == 0)    // even position
            even_sum += value, even_count++;
        else                // odd position
            odd_sum += value, odd_count++;

        cnt++;
    }
    cout << odd_sum / odd_count << " " << even_sum / even_count << "\n";
    return 0;
}
```

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

int main() {
    int N, result = 0;
    cin >> N;
    int cnt = 0;
    while (cnt <= N)
    {
        if (cnt % 8 == 0 || cnt % 3 == 0 && cnt % 4 == 0)
            cout<<cnt<<" ";
        cnt ++;
    }

    return 0;
}
```

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

int main() {
    int N, result = 0;
    cin >> N;
    int cnt = 0;
    int current_number = 0;

    while (cnt < N) {
        if (current_number % 3 == 0 && current_number % 4 != 0) {
            cout << current_number << " ";
            cnt++;
        }
        current_number++;
    }
    return 0;
}
```

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

```
int main() {
    int N;
    cin >> N;
    int pos = 0;
    while (pos < N) {
        string str;
        cin>>str;

        if (str == "no" || str == "No" || str == "nO" || str == "NO" ||
            str == "on" || str == "oN" || str == "On" || str == "ON")
            cout<<str<<" ";

        pos++;
    }
    return 0;
}
```

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

int main() {
    int N;
    cin >> N;
    int number = 0;
    while (N > 0) {
        int last_digits = N % 10;
        N /= 10;
        number = number * 10 + last_digits;
    }
    cout << number << " " << number * 3 << "\n";

    return 0;
}
```

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

int main() {
    int T;
    cin >> T;
    while (T > 0) {
        int N;
        cin >> N;

        int pos = 0;
        int result;

        while (pos < N) {
            int value;
            cin >> value;

            if (pos == 0)
                result = value;
            else if (result > value)
                result = value;

            pos++;
        }
        cout<<result<<"\n";

        --T;
    }
    return 0;
}
```

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

int main() {
    int n, m;
    cin >> n >> m;
    int cnt_n = 1;

    while (cnt_n <= n) {
        int cnt_m = 1;

        while (cnt_m <= m) {
            cout << cnt_n << " x " << cnt_m << " = " << cnt_n * cnt_m << "\n";
            cnt_m++;
        }
        cnt_n++;
    }
    return 0;
}
```