



Shri Vile Parle Kelavani Mandal's

INSTITUTE OF TECHNOLOGY

DHULE (M.S.)

DEPARMENT OF COMPUTER ENGINEERING

Subject: Competitive Programming Lab (BTCOL606)

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Division: T

Expt. No. :10

Date :

Title : Problem 10: Write a Program to implement A multiplication Problem.

Remark

Signature

Code:

```
// MOHAMMAD_ANAS_31_TY_COMP
```

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

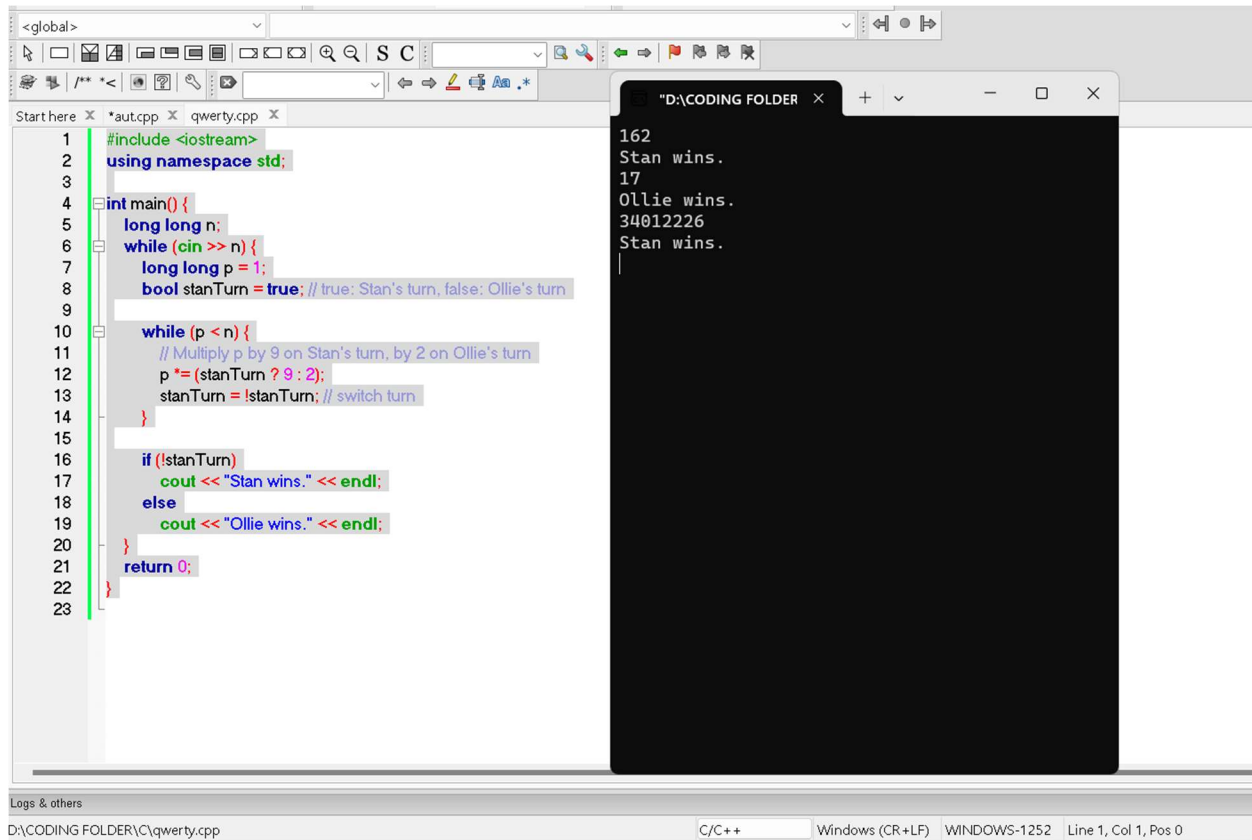
```
int main() {
    long long n;
    while (cin >> n) {
        long long p = 1;
        bool stanTurn = true; // true: Stan's turn, false: Ollie's turn
```

```
        while (p < n) {
            // Multiply p by 9 on Stan's turn, by 2 on Ollie's turn
            p *= (stanTurn ? 9 : 2);
            stanTurn = !stanTurn; // switch turn
        }
    }
}
```

```
if (!stanTurn)
    cout << "Stan wins." << endl;
else
```

```
        cout << "Ollie wins." << endl;
    }
    return 0;
}
```

Output:



The screenshot shows a C++ IDE with a source code editor on the left and a console window on the right. The source code is a C++ program that simulates a game between Stan and Ollie. It takes an integer `n` as input and determines the winner based on a series of multiplications. The console window displays the output of the program for the input `162`.

```
<global>
Start here x *autcpp x qwerty.cpp x
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     long long n;
6     while (cin >> n) {
7         long long p = 1;
8         bool stanTurn = true; // true: Stan's turn, false: Ollie's turn
9
10        while (p < n) {
11            // Multiply p by 9 on Stan's turn, by 2 on Ollie's turn
12            p *= (stanTurn ? 9 : 2);
13            stanTurn = !stanTurn; // switch turn
14        }
15
16        if (!stanTurn)
17            cout << "Stan wins." << endl;
18        else
19            cout << "Ollie wins." << endl;
20        }
21        return 0;
22    }
23 }
```

```
162
Stan wins.
17
Ollie wins.
34012226
Stan wins.
```

Logs & others
D:\CODING FOLDER\C\qwerty.cpp C/C++ Windows (CR+LF) WINDOWS-1252 Line 1, Col 1, Pos 0