

Hands-On Activity 3.1: Repetition Statements	
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The screenshot shows a Visual Studio IDE with a C++ source file named 'Source.cpp'. The code implements a factorial function using a loop and an if-statement to handle invalid input. A debug console window is open, showing the program's execution with input 10 and a rejection message.

```

1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      int n;
6      float factorial = 1;
7
8      cout << "Enter a positive integer to find its factorial: ";
9      cin >> n;
10
11     if (n > 9)
12         cout << "Rejected! The factorial of the inputted number doesn't exist.";
13     else {
14         for (int i = 1; i <= n; ++i) {
15             factorial *= i;
16         }
17         cout << "The factorial of " << n << " = " << factorial << endl;
18     }
19
20     return 0;
21 }

```

Microsoft Visual Studio Debug Console

```

Enter a positive integer to find its factorial: 10
Rejected! The factorial of the inputted number doesn't exist.
C:\Users\Renniel\source\repos\Hands On Activity 3.1 Repetition Sta

```

This screenshot shows the debug console after a successful execution of the program with input 9. It displays the prompt and the resulting factorial value.

Microsoft Visual Studio Debug Console

```

Enter a positive integer to find its factorial: 9
The factorial of 9 =362880

```

Conclusion:

In this activity, I've learned and applied the repetitions structures in C++. There are three (3) types of repetition statements, those are do-while statement, for statement, and while statement. In this activity, the user is asked to input a number limited to 9 and find its factorial, then reject if it exceeds by 9. So, I used for statement to compute the factorial and print a rejected message if the user inputs a number greater than 9.

Earlier I was having an error because I tried to use the do-while statement. I've used the sample program in the handouts, then after I tried it, I noticed that my input just repeated for 5 times, and it didn't compute the factorial. After that, I've tried to use the other statement which is for statement. Then, it finally works after referring to the examples of our professor last week and understanding how the loops work.

I affirm that I will not give or receive any unauthorized help in this activity/exam and that all work will be my own.