

Lab 3

Comp 11 - Summer Session — Guessing Game

3.1 Description

In this lab we will create a C++ guessing game. You will later expand on this lab for your homework assignment. You may work on the lab together with a partner, but you will work on your homework individually.

Our objectives are the following:

- The guessing game works by having a user guess an integer from 1 to 10.
- If the user guesses the correct number, a message is printed saying "correct" (Or something otherwise congratulating the user)
- If the user guesses the wrong number, A message is printed "incorrect", and the user gets another chance.

3.2 Files

You will be creating the files from scratch for this lab. Provided below is some starter code, that demonstrates how to generate a random integer.

You will submit a README and a file called lab3.cpp

```
1 // Starter code
2 #include <iostream>           // std::cout
3 #include <stdlib.h>           // srand, rand
4 #include <time.h>            // time
5
6 int main ()
7 {
8     // Store our guesses.
9     // Notice we can declare two integers on one line ,
10    // if we separate them by a comma.
11    int iRandom, iGuess;
12    // initialize random seed
13    srand (time(NULL));
```

```

14 // generate secret number between 1 and 10: */
15 iRandom = rand() % 10 + 1;
16
17 // Add the rest of your code here
18 //
19 //
20 // ...
21 //
22 //
23
24 return 0;
25 }

```

Listing 3.1: Random Numbers

3.3 Refresher

```

1 #include <iostream>
2
3 int main(){
4 // Storage
5 int x;
6 // Ask for user input
7 std::cin >> x;
8 // Output the value from the user
9 std::cout << "x is: " << x << "\n";
10 return 0;
11 }

```

Listing 3.2: Example input

3.4 Submission

```

1 provide comp11 lab3 lab3.cpp README

```

Listing 3.3: Submit Assignment

3.5 Going Further

Did you enjoy this lab? Want to try out some additional commands to go further?

- Try adding in a loop and allow multiple guesses (at this point, you will have to work individually as this is relatively close to your homework).