Lab 11 Exercise

1) Given the following function prototype:

   ```cpp
   int cube(int n);
   ```

   i) What is the function's name? **cube**
   ii) What is the function's return type? **int**
   iii) What parameter(s) does the function take? **int n**

2) Given the following function prototype:

   ```cpp
   void say_hello();
   ```

   i) What is the function's name? **say_hello**
   ii) What is the function's return type? **void**
   iii) What parameter(s) does the function take? **None**

3) Write a complete C++ program which carries out the following tasks:
   - Asks the user for two integers, \(a\) and \(b\).
   - If \(a\) is greater than \(b\), exit the program.
   - Print a random number (using the \(\text{rand}\) function) between \(a\) and \(b\), inclusive. The formula is as follows:
     \[
     \text{rand()} \% (b - a + 1) + a
     \]
     Amount of numbers from \(a\) to \(b\).

```cpp
#include <iostream>
#include <cstdlib> // srand, rand
#include <ctime> // time

using namespace std;

int main() {
   int a, b;
   cout << "Please enter two integers a and b where a < b: ";
   cin >> a >> b;
   if (a > b) {
      cout << "You enter a value where a > b. Bye!\n";
      return 0;
   }
   cout << "Random number between " << a << " and " << b << ": ";
   cout << rand() % (b - a + 1) + a << endl;
   return 0;
}
```
4) Write a function that prints the word “Hello”, and call this function in main().

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

void say_hello(); //prototype

int main() {
    say_hello();
    return 0;
}

void say_hello() {
    cout << "Hello" << endl;
}
```