## **CS1020E** | **Lab 1** | **Exercise 1**

# Hello, Bye-bye!

## **Objective**

The objective of this exercise is to learn how to do basic standard input and output in C++.

## **Problem Description**

Complete the given C++ program **HelloByeBye.cpp** to achieve the results shown in the following sample runs. Your program should prompt and read in the user's name, and then read in an integer that specifies the number of times the user is to be greeted. The program then outputs the specified number of "hello" greetings to the user, and then says "Bye-bye!" at the end.

# Add your code only to the part of the file indicated. Do not modify any other part of the given code.

The given C++ program has included the <string> header to allow the use of string objects. A string object can be used to contain a string. For more info about the string class, see <a href="http://www.cplusplus.com/reference/string/string/">http://www.cplusplus.com/reference/string/string/</a>.

The given program is using the function <code>getline</code> to read a string from the standard input. The reason why it is used is that the input name may have white spaces, and <code>getline</code> can read the whole name into one single string. For more info about the <code>getline</code> function, see <a href="http://www.cplusplus.com/reference/string/string/getline/">http://www.cplusplus.com/reference/string/string/getline/</a>.

#### **Inputs**

The input name can have white spaces, but will have at least one non-white-space character. The input integer is always non-negative (can be 0).

## **Outputs**

For the inputs as shown in the following sample runs, your program must produce exactly the same outputs, i.e. the white spaces and newlines must be at the same places.

#### Sample Run 1

```
What is your name? Michael J. Fox Hello how many times? 5
1: Hello, Michael J. Fox.
2: Hello, Michael J. Fox.
3: Hello, Michael J. Fox.
4: Hello, Michael J. Fox.
5: Hello, Michael J. Fox.
Bye-bye!
```

(User inputs are shown in **bold red**.)

## Sample Run 2

What is your name? Pauline Tan Hello how many times? 0
Bye-bye!

(User inputs are shown in **bold red**.)

#### **Submission**

You need to submit only your completed **HelloByeBye.cpp**. to CodeCrunch (<a href="https://codecrunch.comp.nus.edu.sg/">https://codecrunch.comp.nus.edu.sg/</a>) before the specified deadline. We will take only your latest submission.

Late submissions will not be accepted. The submission system in CodeCrunch will automatically close at the deadline.