Editing a C++ file on Linux

We are going to use the vim editor to edit our C++ source code files.

To launch vim to edit the file:
vim <name_of_file>
Example: vim helloworld.cpp

To launch the vim tutorial:
vimtutor

The vim program will create the file if the file doesn’t exist. If the file does exist, it would open existing file for editing.
VIM continue
While your file is open:
To enter writing mode press <i> button
To exit writing mode press <esc> button
To save changes and exit vim:
  • make sure you are not in the editing mode (press <esc> button if you are)
  • type up a semicolon <:, it will bring you down the page where you can type up <wq>
To exit the editor without saving changes:
  • make sure you are not in the editing mode (press <esc> button if you are)
  • type up a semicolon <:, it will bring you down the page where you can type up <q!>
Exercise
In the home directory, perform the following:
1. Change into directory cs111
2. Make directory lab2
3. Change into lab2 directory
4. Start the vim editor
   
   vim hellouser.cpp
5. Type up the following code:
   
   ```cpp
   #include<iostream>
   using namespace std;
   int main() {
       string name;
       cout << "Enter your name: ";
       cin >> name;
       cout << "Hello " << name << endl;
       return 0;
   }
   
   6. Save changes and exit vim.
Compile and Run program

To run the program we have just written first we have to compile the program:

```
g++ <name_of_source_code_file.cpp>
```

Example: `g++ helloworld.cpp`

If the program compiled successfully, there would be no output from the g++ program, any output you see are errors you will have to fix. Compiler usually gives you some information about the error, the # of a line, the error description.

Example:
```
hello.cpp:5:2: error: use of undeclared identifier 'cut'; did you mean 'cout'?  
Explanation: On line 5 there was a mistype, ‘cut’ should be ‘cout’
```

To run the program: `./a.out`
**Compile and Run Exercise**

Compile and run the program you previously typed up.

Use the following commands:
1. `g++ hellouser.cpp`
2. `./a.out`

At this point you should see the output:

Enter your name: Marina

Hello Marina