

Assignment 1: Intro C++

Due Wednesday May 25th, 2011 by 11:59 pm.

- ◆ Submit deliverables to the Course Management System: <https://courses.cs.sfu.ca/>
- ◆ Late penalty is 10% per calendar day (each 0 to 24 hour period past due).
 - Friday, May 27th is the last possible day to submit (11:59 pm).
- ◆ This assignment is to be done individually. Do not show another student your code, do not copy code found online, and do not post questions about the assignment online. Please direct all questions to the instructor or TA:
 - For CMPT125, email cmpt-125-d2-help@sfu.ca;
 - For CMPT128, email cmpt-128-help@sfu.ca.
- ◆ See the marking guide for details on how each part will be marked.

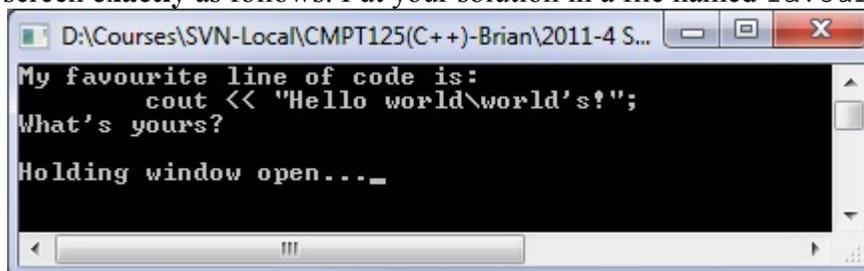
1. Jumbled Code

Reorder the following correct lines of C++ code into a working program which, when run, correctly tells a joke. Put the correctly reordered statements into a file named `jumble.cpp`, and **fix the indentation on all lines**. Make sure you compile and run the program to prove it works.

```
cout << "A: None; it's a hardware problem.\n";
using namespace std;
char a; cout << "\nHolding window open..."; cin >> a;
return 0;
// Simple program to tell a joke
cout << "Q: How many programers does it take"
<< "to screw in a lightbulb?" << endl;
int main() {
// Hold window open...
// Tell the joke...
}
// <YOUR NAME>, <YOUR STUDENT NUMBER>, <YOUR SFU EMAIL ID>
#include <iostream>
```

2. Favourite line of code

Write a C++ program which generates the following output to the screen. The output must be printed on the screen **exactly** as follows. Put your solution in a file named `favourite.cpp`.



```
My favourite line of code is:
    cout << "Hello world\\world's!";
What's yours?
Holding window open..._
```

- ◆ Your solution must **use exactly one cout statement**, and **one << operator** (in addition to what's needed to show "Holding window open...")!
- ◆ Note that the text shown on the screen is just text; it looks like C++ code, but it's just text!
- ◆ Match the provided output exactly; do not change the "favourite" code that it displays.

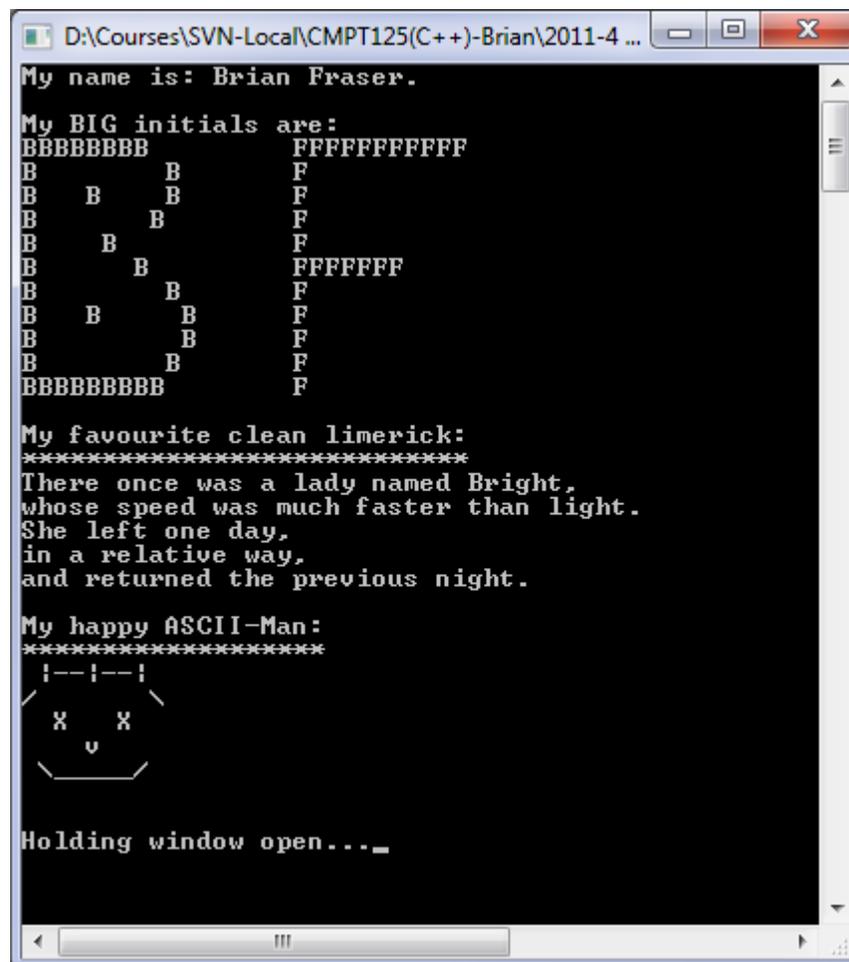
3. Personal Display

Write a program in the file `personal.cpp` which output the following to the screen:

1. *Your* name.
2. *Your* first and last initial (and more if you like) drawn as big letters, spelled out using the letter you are drawing. For example, I'm Brian Fraser, so my initials BF are shown below.
3. *Your* favourite (*clean*) limerick.
4. A happy face drawn using ASCII characters like `\, /, |, _, -, #, $, %, *, (,), [,], !, @, ...`

Notes:

- ◆ An example output is shown below.
- ◆ Use your own initials, pick a limerick, and draw a happy-face (don't just copy mine, be creative!).
- ◆ You may use any number of `cout` statements and `<<` operators as you choose; try and make your code readable and clear.
- ◆ You may copy the limerick from a website. If you do have your program **output the URL of the site** (citations are important in university!).



```
D:\Courses\SVN-Local\CMPT125(C++)-Brian\2011-4 ...
My name is: Brian Fraser.

My BIG initials are:
BBBBBBBBB      FFFFFFFFFF
B          B      F
B   B   B      F
B     B      F
B      B      F
B        B      FFFFFFFF
B         B      F
B    B    B      F
B      B      F
B       B      F
BBBBBBBBB      F

My favourite clean limerick:
*****
There once was a lady named Bright,
whose speed was much faster than light.
She left one day,
in a relative way,
and returned the previous night.

My happy ASCII-Man:
*****
 |--|--|
 /  \
X   X
  v
 /  \

Holding window open..._
```

4. Deliverables

Submit the items listed below to the Course Management System: <https://courses.cs.sfu.ca/>

1. `jumble.cpp`
2. `favourite.cpp`
3. `personal.cpp`

Each of your `.cpp` files must begin with a comment stating your name, your SFU user ID, and your SFU student number.

Please remember that all submissions will automatically be compared for unexplainable similarities. We expect that everyone's submissions will be quite similar, given the nature of this assignment, but please make sure you do your own original work; we will still be checking.