

## CS1 - Std IO Lab

Possible points: 100

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### ASCII Art - Standard Input/Output Lab

Write a C++ program that displays some ASCII Art on to the console or standard output.

#### Lab Instructions

1. Setup GitHub account if not done already; follow instructions under HW0 in D2L.
2. Open your repo folder (CS1-...) in Visual Studio Code
3. Create a folder called `ascii` inside labs folder
  - a. Inside `ascii` folder, create a new `cpp` file called `ASCIILab.cpp`
4. Add `main.cpp` file to git repo then commit and push it
5. Do **git add, commit and push** as often as possible after every major improvement or addition to your program so you are familiar with the commands and you've a working backup
6. Type the code stub in `main.cpp` file as a hint to complete the lab:  
<https://github.com/rambasnet/CPPFundamentals-Notebooks/tree/master/labs/stdio>
7. Use the Makefile to compile and build program:  
<https://github.com/rambasnet/CPPFundamentals-Notebooks/tree/master/labs/stdio>
8. Never copy paste code; you'll not learn anything by doing so!
9. Type each line of code and use **incremental development** techniques to learn what the given code does and what happens when you add each line(s) of new code to complete your lab
10. Fix all the FIXMEs and write `#fixed#` at the end of each code FIXME that's fixed except at the end of your name and date
11. The completed lab should produce the following ASCII Art

```
| \_ / |      *****      ( \_ / )
/  @  @  \    *      ASCII Lab    *      (= ' ! =)
( >  0  < )   *      By: <Your name> *      ( " ) _ ( " )
    >>x<<     *      CSCI 111      *
/   O  \      *****
```

12. Create a screenshot of the completed program being tested with the final output being displayed on the console and put it inside the same `ascii` folder. **(10 points)**
13. When done, update your README file **(10 points)** as shown here:  
<https://github.com/rambasnet/csci000-astudent>
14. All FIXMEs are worth equal points unless stated otherwise.

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**Submission:**

1. Add all the relevant source file(s) and documents into the correct folder and do a final add, commit, and push before the due date.
  - a. `$ git status`
  - b. `$ git add <filename>...` - add each file that was new or modified that is part of this assignment
  - c. `$ git commit -m "Final Submission"`
  - d. `$ git push`
  - e. `$ git status`
2. Check and make sure the files are pushed to your GitHub repo.
3. **NOTE: Do not add and commit to this lab folder after the due date as it may be considered late submission!**