

Name \_\_\_\_\_

## **Mohawk Valley Community College**

### **CI 132 Lab 15**

1. Collectively, the term "standard I/O" refers to standard input, standard output, and standard error.
  - a. Define these three types of I/O
  
  
  
  
  
  
  
  
  
  
  - b. What does it mean to redirect standard I/O?
  
  
  
  
  
  
  
  
  
  
  - c. Show how to redirect all three types of standard I/O.
  
2. What are the abbreviations and file descriptor numbers for the three standard I/O streams?

3. What is a pipeline? What metacharacter do you use to separate the components of a pipeline?
4. What is a filter? Why are filters so useful?
5. What command sequence can be used to display only a count of the number of files in `/opt/ci132/graded/`. Include the total number of files present and the command string used to obtain it.
6. Demonstrate using a pipeline to send the output of one command as input to another. Your example must not have already been presented in the textbook, in class, or in previous lab assignments.

7. What is the bit bucket device file? Why is this feature useful? Provide an example to illustrate your point.
8. Given a large text file, which filter would be used to:
- a. remove duplicate lines
  - b. display lines containing a specific pattern
  - c. join the output of multiple text files
  - d. display the end of a text file or data stream
  - e. display the beginning of a text file or data stream
  - f. print the number of lines in a file or data stream
  - g. sort lines of text