Tutorial Sheet

Part 1: Algorithms

Question 1: What is an algorithm?
Question 2: Name a type of algorithm that is not a program.
Question 3: Algorithms are named after:
   a) Euclid
   b) Brahmagupta
   c) Muhammad ibn Musa al-Khwarizmi
   d) Al Gore
Question 4: Create a flowchart that expresses the following algorithm:
   1. Ask the user for their age
   2. If the user's age >= 18, print "Welcome to Rick's Place"
   3. Otherwise, print "Come back when you are of age"
   4. Go back to step 1 to serve the next user
Question 5: Create pseudocode for the same algorithm
Question 6: Create a flowchart and pseudocode for the process of getting ready to leave the house in the morning. Include such activities as hitting the snooze button several times, taking a shower, getting dressed, and so on. Make sure to have different procedures depending on whether it is a weekday or weekend.

Part 2: The Command Line
Question 1: What is the command line used for?
Question 2: What did the command line replace? Why?
Question 3: With GUIs everywhere, why is the command line still in use?
Question 4: What computer had the first GUI?
Question 5: Which key performs auto-complete? Why is auto-complete useful?