Computing Scavenger Hunt

Due at the beginning of class on Monday, Aug 27th

Points Earned: ______________  Scaled out of 6: ______________

For full credit on this assignment, you need to correctly complete at least 60 of the 85 possible points. If you do not complete 60 points correctly, your grade will be the number of points completed out of 60. If you complete more than 60 points correctly, good for you (but you will not be getting any extra credit). Your grade on this assignment will be scaled to be out of 6 points and entered into Canvas. All of the answers can be discovered around campus, in zyBook assignments, or through some web searches online. Expect this assignment to take you 30-90 minutes (depending how much energy you want to put into it!) You can do this assignment with one friend/peer; if yes, both names (and both section numbers) should be included on the answer sheet. Any student who receives 85 points will be put into a raffle for two CS@Mines t-shirts.

1. (5 points) According to the zyBook, who is generally regarded as the first computer programmer?

2. (3 points) ...and what was the name of the device that he/she wrote programs for?

3. (5 points) Friday (Aug 24th) from 4pm to 7pm, the Mines ACM Student Chapter will be at (or was at) the Celebration of Mines. What is the name of the model of computer that they used for mailing list signup?

4. (3 points) ...how much RAM does it have?

5. (3 points) “ACM”, as in the “Mines ACM Student Chapter” or the “ACM ICPC”, stands for what?

6. (4 points) Mines students will participate in an event known as “Hackathon.” Describe what one of these events entail.

7. (3 points) The first personal computer was built by John Blankenbaker in his garage. What year did he build this computer?

8. (3 points) The first computer built for sale was called what?

9. (5 points) Who popularized the idea machine-independent programming languages which led to the development of high-level programming languages?
10. (8 points) Name all the kinds of non-volatile storage displayed at the computing history showcase in the east side of the CTLM building.

11. (2 points) Describe the difference between volatile and non-volatile storage. What type of storage is volatile?

12. (5 points) What version of NeXTSTEP is displayed next to the NeXTcube in the CTLM building?

13. (5 points) What is the name of the Linux lab located at BB 136?

14. (8 points) ... and what does it stand for?

15. (3 points) What is the most fundamental difference between a Linux operating system and a Windows operating system?

16. (2 points) The “Isengard” server is accessible to all mines students. Which operating system does it run under?

17. (5 points) Mines has a new Blockchain student organization that meets Thursdays at 5pm in AH140. What is blockchain, and what is one word that describes how it works?

18. (3 points) Where is the SINE lab located and what does it stand for?

19. (3 points) Guido Van Rossum published the first version of this high-level programming language in February of 1991. Which programming language was this?

20. (3 points) In the 1980s the first object-oriented language to be widely used commercially was developed by Bjorn Stroustrup. Which programming language does this refer to?

21. (4 points) Which of the following was the primary innovation of the Von Neumann architecture?
   a. Use of transistors instead of vacuum tubes
   b. Ability to perform floating-point (real number) calculations
   c. Storage of program instructions in the internal memory unit
   d. Purely electronic design, no mechanical parts for computation