CS2022 ASSIGNMENT 3 (Due Date: Sep 23, 2022)

Instructions: This assignment consists of two parts. Part I consists of twenty questions about the BBC documentary. Part II consists of five questions about the content in the lecture note on the history of computer. You have to answer all of them. Put your answers in a MS WORD file, or other word processing file, and then submit the file to the course Gmail account.

1 Part I: BBC Documentary

1. After World War II, Alan Turing was involved in the design of a stored-program computer based on his conceptual model introduced in 1930s. What is the name of this computer?

2. What is the title of the paper in which Alan Turing presented the idea of computing machines (i.e. the conceptual model of a computer)?

3. The work done by Alan Turing in code breaking during the World War II was kept in secret for decades. Around in which year, his contribution in WWII was disclosed?

4. What was the cause of the death of Alan Turing in 1954?

5. After WWII, John Mauchly and J. Presper Eckert in US started a venture on making commercial computers. However, people were skeptic on this. In the video, two skeptical reasons have been mentioned. What are they?

6. John Mauchly and J. Presper Eckert named the computer to be made the UNIVAC. What is the full name of this machine?

7. In UK, the first commercial computer was designed and built by a company called Lyon. What businesses Lyon was famous for?

8. In 1947, Lyon got experts from academic to design and build the computer. From which university, the Lyon got the experts?

9. In which year, Lyon started a new product line called "Computers"?

10. In US, Eckert-Mauchly Computer was finally sold to Remington Rand. A new division under Remington Rand was created to continue on the Eckert and Mauchly computer project. What is the name of this new division?

11. In which year, UNIVAC was used for the prediction of the outcome of the US president election?

12. By the end of 1953, how many UNIVAC machines had been installed?

13. What are the social effects of computers in factory and office automation?

14. When did Apple design her first computer?

15. When was the device 'mouse' designed and who designed it?

16. Why Xerox did not make computer?

17. What is ALTAIR 8800 and when did it appear in the market?

18. When did IBM design her first personal computer?

19. Apart from expensive pricing, what other factor led the first generation of IBM PC fail in the market?

20. What is the key feature of Macintosh making it very difference from other PCs appeared in 1984?

2 History of Computers (in the PPT slides and in the lecture)

1. Babbage Difference Machine was built for solving what kind of problems?

2. With reference to the lecture slides, what major inventions or technological advancements led to the realizations of the first, second, third and fourth generations of computers?

3. State the evolution of the methods of controlling an operating system from the fifth to the seventh generation of computers.

4. State the names of two conceptual models of computer which were proposed in the earlier 20th century.

5. Today, almost all computers their architectures follow one of these conceptual models. Which one is it?