Unit 4 - Activity 4 - Exploring Computer Science Reading

Students will study from following websites

https://www.khanacademy.org/computing/computer-science/cryptography/crypt/v/intro-to-cryptography

https://www.edx.org/course/artificial-intelligence-ai-columbiax-csmm-101x-0

An Introduction to Data Mining

Discovering hidden value in your data warehouse

http://www.thearling.com/text/dmwhite/dmwhite.htm

Data mining, *the extraction of hidden predictive information from large databases*, is a powerful new technology with great potential to help companies focus on the most important information in their data warehouses. Data mining tools predict future trends and behaviors, allowing businesses to make proactive, knowledge-driven decisions. The automated, prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems. Data mining tools can answer business questions that traditionally were too time consuming to resolve. They scour databases for hidden patterns, finding predictive information that experts may miss because it lies outside their expectations.

Most companies already collect and refine massive quantities of data. Data mining techniques can be implemented rapidly on existing software and hardware platforms to enhance the value of existing information resources, and can be integrated with new products and systems as they are brought on-line. When implemented on high performance client/server or parallel processing computers, data mining tools can analyze massive databases to deliver answers to questions such as, "Which clients are most likely to respond to my next promotional mailing, and why?"