COMPSCI 1JC3
Introduction to Computational Thinking
Fall 2017

02b Discussion Session

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Admin

- M&Ms start this week.
- First programming assignment will be posted this Friday, September 15, and will due on Friday, September 29.
- "All Questions Answered!" next week in the tutorials.
- Office hours: To see me please send me a note with times.
- Are there any questions?

Review

1. Computers as universal machines.
2. Alan Turing.
3. The Turing Machine.
4. Finite state machines.
5. Charles Babbage and Ada Lovelace.
6. Syntax vs. semantics.
7. High- vs. low-level programming languages.

Who was Mohammad Al-Khwarizmi? (iClicker)

Who was Mohammad Al-Khwarizmi?

A. Called Algoritmi.

B. Helped spread the use the Hindu-Arabic numeral system.

C. One of the fathers of algebra.

D. Spent most of his life at the House of Wisdom.

Mohammad Al-Khwarizmi

- Mohammad Al-Khwarizmi (c. 780–850) was a great mathematician who spent most of his life at the House of Wisdom in Baghdad.
  - ▸ The Latin form of his name is Algoritmi.
- Introduced arithmetic based on the Hindu-Arabic numeral system to the Middle East and Europe.
  - ▸ The method was called algorism, from which the word algorithm is derived.
- Wrote one of the seminal books on algebra.
  - ▸ Provided an exhaustive account of how to solve linear and quadratic equations.
  - ▸ Proved his results using geometry.
  - ▸ The term "algebra" come from the word "al-jabr" in the name of this book.

Mohammad Al-Khwarizmi