

M1 Ch01 Beyond the Book: History of Computing

List 1 - 3 factoids:

- 1. The abacus has been dated back to the 1100 BCE and was one of the first aids in counting.**
- 2. One of the very first digital computers, the ENIAC (Electronic Numerical Integrator and Computer) “contained 17,468 vacuum tubes, 7,200 crystal diodes, 1,500 relays, 70,000 resistors, 10,000 capacitors and around 5 million hand-soldered joints. It weighed 30 short tons (27 t), was roughly 8.5 feet by 3 feet by 80 feet (2.6 m by 0.9 m by 26 m), took up 680 square feet (63 m²), and consumed 150 kW of power.” What a monster! This is a credit to the man’s engineering creativity writ large - kind of like the *Great Pyramid* of computing.**
- 3. The first Apple computer was small enough to fit on a dining room table. I was in a Gifted and Talented program when the Apple IIE was in its first educational implementation. I remember being able to write very simple programs - I think in DOS - on it as a child.**

List 2 - 3 historical individuals:

- 1. Blaise Pascal was a brilliant philosopher and mathematician. He is well known for the Arithmetic machine and Pascal’s Wager.**
- 2. Charles Babbage proposed the Difference Engine that could perform multiple calculations in the 1830s - possibly the first complex computing machine that included data storage. However, it never came to fruition.**
- 3. John von Neumann is my Tony Stark of mathematics and computing. Among all of his amazing achievements he created the architecture for the general purpose electronic computer.**