**ENIAC**

* ENIAC or short for Electronic Numerical Integrator and Computer, was a product of the US government funded project during World War II to build the first programmable computer. This project was based out of the University of Pennsylvania’s Moore School of Engineering.
* Built by the American physicist John Mauchly, American engineer J. Presper Eckert, Jr and their colleagues. The whole project was led by Herman Goldstine, starting in 1943.
* Mathematician John von Neumann also began frequent consultation with the group on the project in 1944
* The ENIAC was built specifically for computing the values of artillery range tables
* The ENIAC used plugboards to relay the instructions / plugboards were used to program the instructions. After it has the instructions, the ENIAC ran at a speed which would not be comparable to the mechanical devices used at the time
* The only downside to the ENIAC was that in order to reprogram the ENIAC, it took few days to rewire everything for that specific instruction which is being needed.
* Even with its downside the ENIAC was by far the most powerful calculating device built in its time. And to this day it is considered the first general electronic digital computer which is programmable
* Even though ENIAC had specific goal when being built, like the Charles Babbage’s Analytical Engine or the British World War II computer colossus, it could be given different instructions depending on the value of one data point, making ENIAC a flexible machine.
* ENIAC by size was very large taking up 135m^2 (15-by-9 meter), where 40 panels were put up in U shape along three walls
* Eniac consisted of 17,000 vacuum tubes, 70,000 resistors, 10,000 capacitors, 6000 switches and 1500 relays making it the most complex electronic system to be built
* Since ENIAC generated so much heat it required its own air conditioning system to keep it from overheating
* Computers which consist of vacuum tubes just like ENIAC are known as the first-generation computers.
* The project finished on 1946 February, costing the government 400,000 dollars and the war had already ended.
* Instead of the actual calculating the artillery range, the first task ENIAC operated was for the construction of a hydrogen bomb.

Sources:

<https://www.britannica.com/technology/ENIAC>

<https://www.hp.com/ca-en/shop/offer.aspx?p=computer-history-all-about-the-eniac>