Task 1 – Mind Map

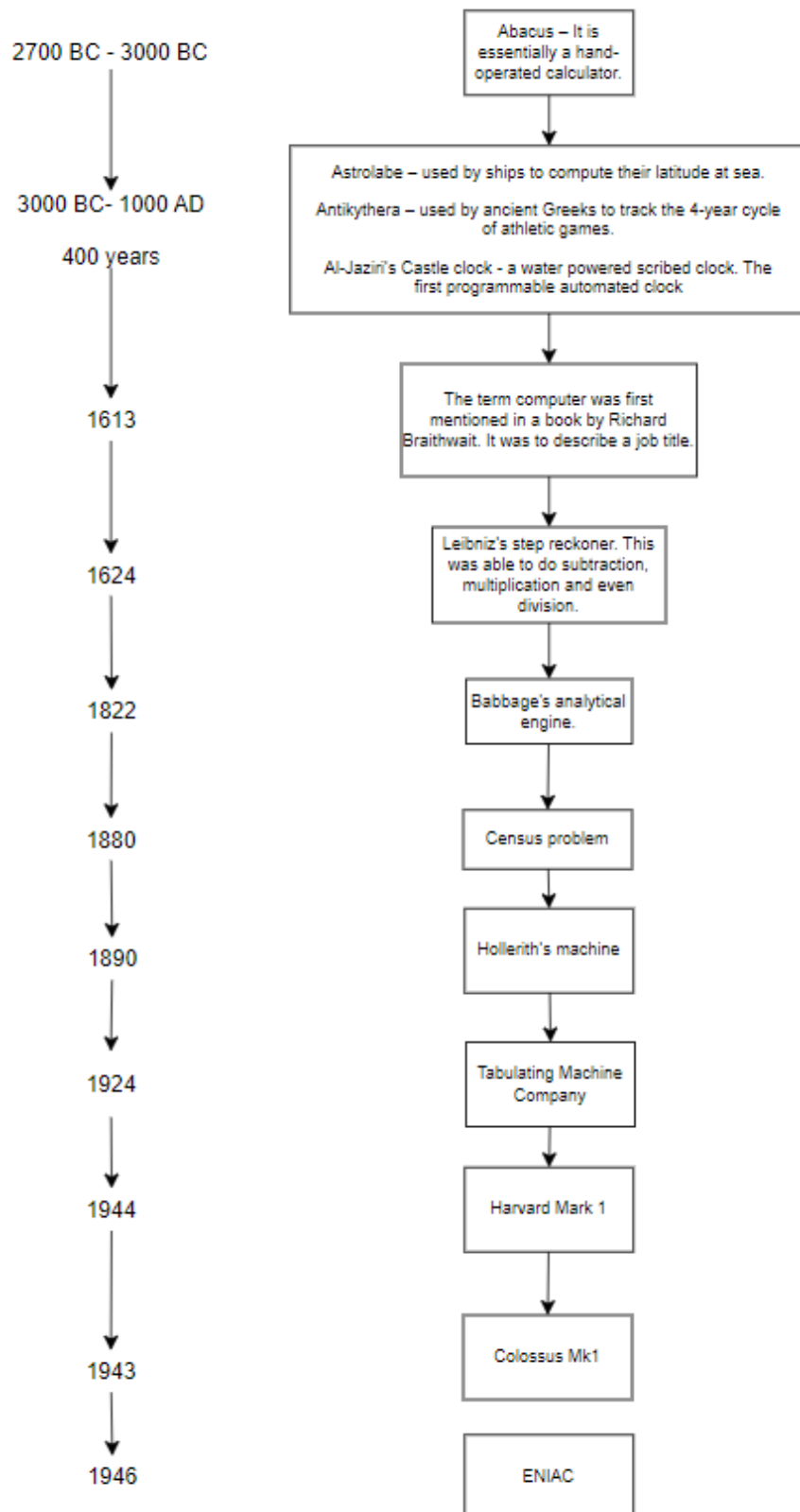| Timeline		Events
2700 BC - 3000 BC		Abacus – It is essentially a hand-operated calculator.
3000 BC- 1000 AD		Astrolabe – used by ships to compute their latitude at sea. Antikythera – used by ancient Greeks to track the 4-year cycle of athletic games. Al-Jaziri's Castle clock - a water powered scribed clock. The first programmable automated clock
400 years		
1613		The term computer was first mentioned in a book by Richard Braithwait. It was to describe a job title.
1624		Leibniz's step reckoner. This was able to do subtraction, multiplication and even division.
1822		Babbage's analytical engine.
1880		Census problem
1890		Hollerith's machine
1924		Tabulating Machine Company
1944		Harvard Mark 1
1943		Colossus Mk1
1946		ENIAC

Task 2 - Binary system

Leibniz invented the binary system. He contributed to calculus and created the step reckoner.

Task 3 - Vacuum vs transistor tube

Vacuum tubes are more fragile and are bigger in size. Transistors are less fragile and allow machines to be way smaller.

Task 4 - ENIAC

The ENIAC was the first truly general purpose electronic programmable computer which marked the era of electronic computers. It can perform 5000 ten-digit additions and subtractions per second.

It waits for an IBM specialist to give ENIAC an input card and then ENIAC shows the output using a punch card.

It does not have a monitor.

Task 5 - Explain how Antikythera and Al Jaziri's castle clock works? How do they mechanically work?

You must turn a small crank that would drive a set of over 30 gears inside the device's case. Four dials on the front and back faces of the mechanism predict the position of the known planets, the sun and the locations and phases of the moon.

At the beginning of the day all 24 doors in two rows are closed and the golden crescent is positioned to the left. During the day, the half-moon is moving right every hour the upper doors open and a figure comes out and stands as if he had suddenly emerged, the lower door is rotating on the axis and two falcons with outspread wings lean forward and cast a bronze ball into a vase which makes a sound that can be heard from afar.

Extra Task

It is not certain.