INTRODUCTION TO PROGRAM

Information Technology: The use of digital technology like computers and the internet, to store and process data into useful Information.

What does IT Support Specialist do?
- Managing
- Installing
- Maintaining
- Troubleshooting
- Configuring office and computer equipment.

Key terms from the lesson:
Computer is a device that stores and process data by performing calculations.
An algorithm is a series of steps to solve specific problem.
Cryptography is the art of writing and solving codes initially today it is more about security.

FROM ABACUS to ANALYTICAL ENGINE:

"In the world of technology it's important to understand where we have been, where we are and where we are actually going."

- ABACUS is invented in 500 BC for performing calculations.
- Mechanical calculator was invented in 17th century by Blaise Pascal.
- In 1800s, a man by the name of Joseph Jacquard invented a programmable loom. It has holes and it hooked when it encounter any whole. It was designed as a designing tool for fabric which uses Punch Cards.
- Charles Babage Analytical Engine. Use punch cars to output.
- Ada Lovelace developed first algorithm for performing calculations.

Magnetic Tapes >> Vacumm Tubes >> Transistors

Very first compiler was invented by **Admiral Grace Hopper**.
Xerox alto was the first computer that resembles the PC's we use now.
Unix was an OS developed by Ken Thompson and Dennis Ritchie.
PDA(Personal Digital Assistance) allow computing to go to mobile.

DIGITAL LOGIC:

Binary system: The communication that computer uses.
Each byte can store one character, and we can have 256 possible values,
thanks to the base-2 system, 2^8.

Character Encoding: Assign Binary values to the characters so that we can read them.