ROBOT Computer and its Programs

Key Concepts

- Some important concepts:
  - Computers are not able to do anything with the data they have stored until they are given instructions for processing it.
  - All data that computers contain and manipulate must be in binary form.
  - The only thing a computer understands is binary
  - Computer instructions must be performed sequentially, in the order presented.
  - Every instruction in a program must have one meaning.

Key Concepts

- Concepts continued:
  - Computer instructions are divided into two parts: operation code (opcode) and operand.

  - In every language, there are commands that make no use of the operand part of an instruction. (STOP)
  - Programs, written in any language, are translated into binary form by assigning a numeric form to each instruction, then converting each numeric value to its binary equivalent.
  - Once a program is expressed in binary form, the computer can use it directly. (Machine language program)