

FIRST GENERATION

- vacuum tubes used - slow I/O, punched cards
- problems with heat and maintenance
- used for payroll and record keeping
- Univac I

SECOND GENERATION

- used transistors (developed at Bell Labs)
- used tape for I/O
- increased speed and reliability (threw off less heat)
- used for billing and inventory
- IBM 4101, Honeywell 200

THIRD GENERATION

- used integrated circuits
- used magnetic disks for I/O
- airline reservations and market forecasting
- IBM 360, NCR 395.

FOURTH GENERATION

- used large-scale integrated circuits
- increased storage capacity and speed
- greater variety of I/O devices
 - tape, disk, microfilm, voice
- used for simulation, CAD/CAM
- IBM 3090, Sperry Univac 1100.

FIFTH GENERATION

- ???

- gallium arsenide instead of silicon?

- true artificial intelligence?

- bio-engineered computers?