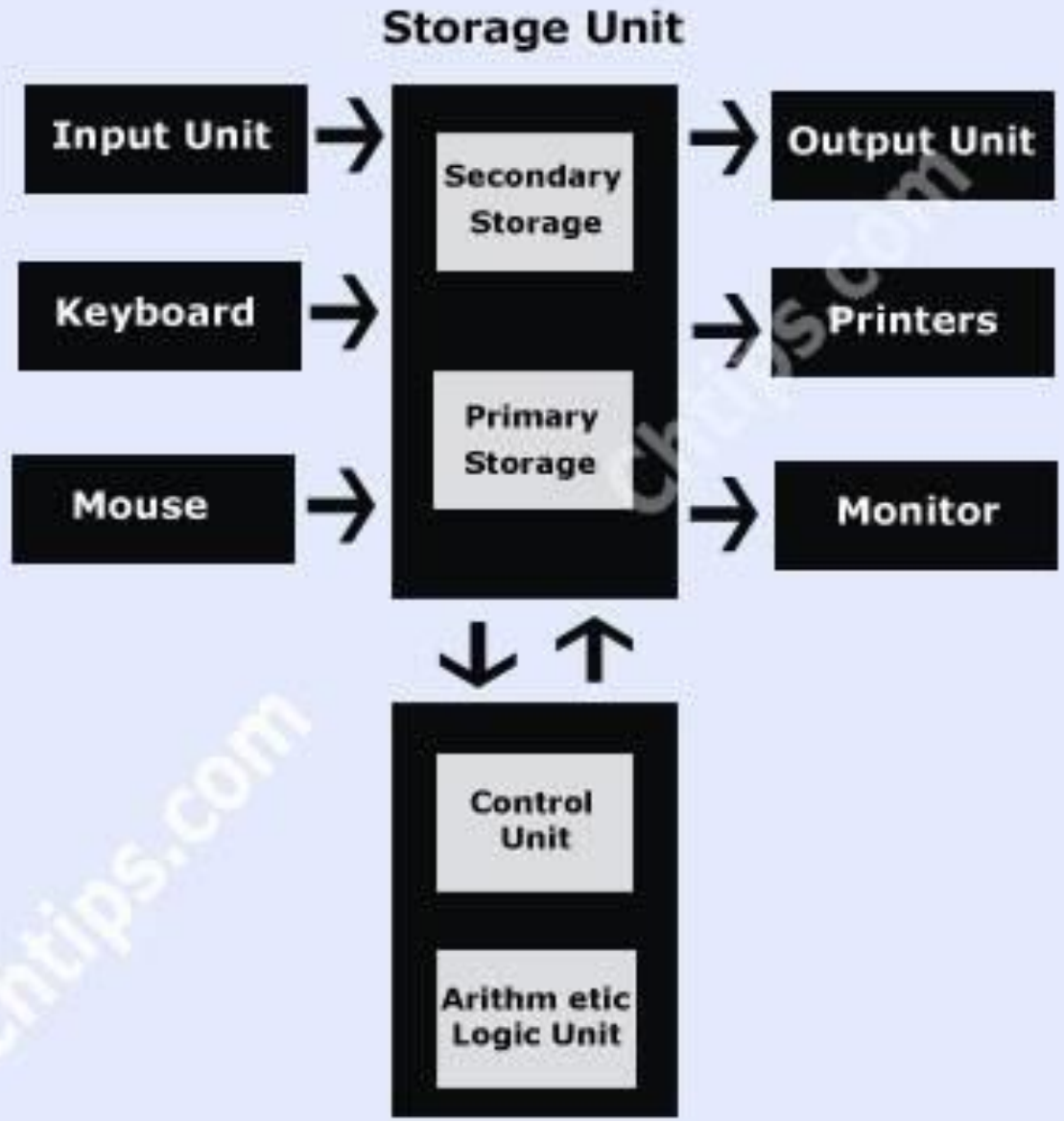
Advantages of Computers

- Speed
- Accuracy
- Stores huge amount of data
- Online trading
- Online education | Distance Learning
- Research
- Forecasting weather and predicting earthquakes ,volcano eruptions
- Produce Employment
- Internet
- In Business

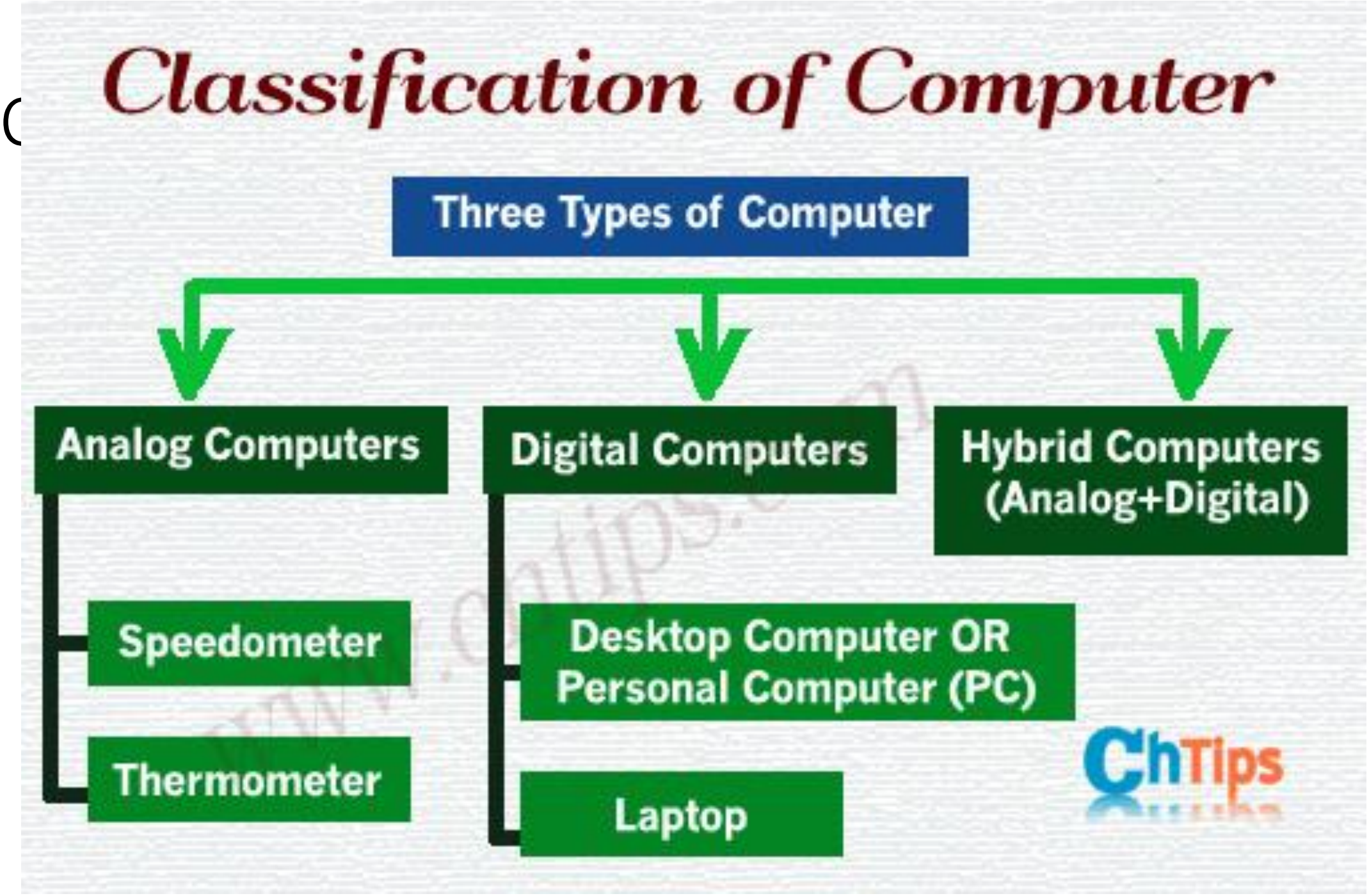
Disadvantages

- Health Issues.
- Virus and hacking attacks
- Computer can not take their own decision NO IQ
- Negative effect on Environment
- Crashed networks
- Computer can not work on itself
- Spread of violence hatred
- Online Cyber Crimes
- Data and Information violation

Block Diagram Of Computer

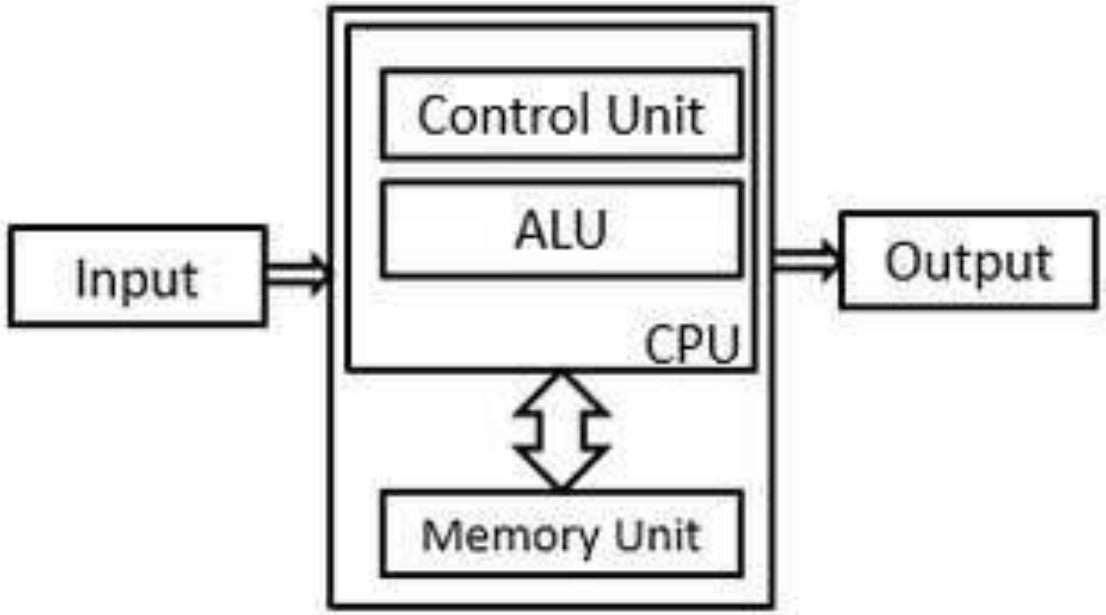


Classification of Computer



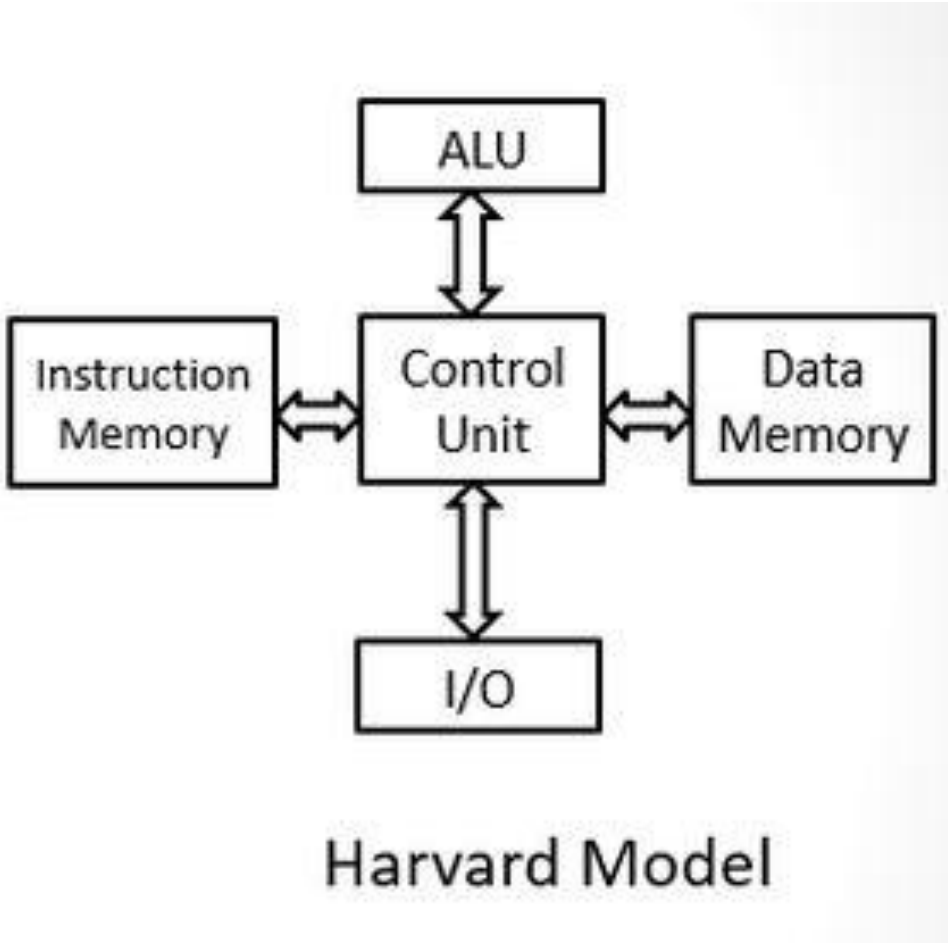
Architecture

Von Neumann Architecture



Von Neumann Model

Harvard Model



Comparison

- Arrangement In Harvard architecture, the CPU is connected with both the data memory (RAM) and program memory (ROM), separately.

  In Von-Neumann architecture, there is no separate data and program memory. Instead, a single memory connection is given to the CPU.

Comparison

- Hardware Requirements : Harvard requires more hardware since it will be requiring separate data and address bus for each memory.

In contrast to the Harvard architecture, Von Neumann requires less hardware since only a common memory needs to be reached.

Comparison

• Space Requirements : space.	Harvard Architecture requires more
	Von-Neumann Architecture requires less space.
Speed of execution :	In Harvard Architecture speed of Execution is faster as Code and Data can be fetched simultaneously
	Slower in Von Neumann as Simultaneous Fetching not Possible

Comparison

- Space Usage:

  In Harvard Architecture Inefficient usage of Space is there as Space left in Code Memory cannot be used for Data and vice versa

  Space is not Wasted in Von Neumann Architecture as Space is common

- Controlling

  Complex controlling is required in Harvard Architecture as Instructions and Data are fetched simultaneously