**MAINFRAME COMPUTER:**

* Tools we need:
* Mainframe
* Operating system
* Terminal
* We need Mainframe -> Z/OS operating system is installed in mainframe -> we need terminal (it's keyboard and screen) -> we type command on terminal that is then sent to mainframe -> then mainframe processes it and send back to terminal to display it.
* Hercules is a emulator that behaves like mainframe, it behaves like S/370 Mainframe
* MVS Turnkey = Hercules + Operating system (Z/OS | OS/VS2)
* HERC01 | CUL8TR

**WHAT IS MAINFRAME:**

* Mainframe generally means central form of computing.
* It is highly secured, high performance computer system, designed to run continuously and process huge amount of data at high level of utilization
* Mainframe can support 1000s of i/o devices, applications and users at same time
* It can run over Million Instructions Per Second (MIPS), they have dedicated processors for i/o channels over 100 processors and 32TB of RAM
* Mainframe also called Big iron or dinosaurs
* Business use mainframe to host their databases, transaction servers, applications as it requires greater degree of security and availability.
  + Ex: Banks use mainframe to host their critical transaction such as ATM transaction, airlines ticket booking
* One mainframe can simultaneously run over 60 operating system at same time, like ubuntu, linux, suse.
* O/S: z/OS, z/VM, z/VSE, Linux

**WHO USES MAINFRAME:**

* It is used in below business:
  + Banking (92 out of 100 top banks uses mainframe)
  + E-businesses (OS called z/TPF is specially aimed at transaction based business operations)
  + Finance
  + Health care
  + Insurance
  + Govt and other public and private enterprises
* Mainframe can perform 1000s of transactions per second.
* It can support 1000s of users and applications at the same time.
* Approx 300 billion transactions are done per day, compared to google which is 4 billion searches per day.