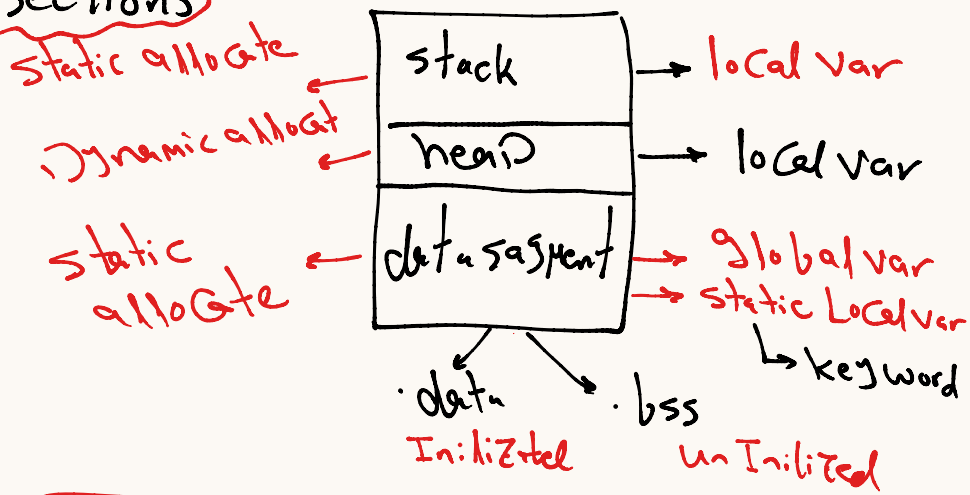
Memory

Memory Classification

- ① Volatile Memory
  - Power loss / data loss
  - ex:. RAM
- ② Non Volatile Memory
  - Power loss / data still stored.
  - ex:. ROM, Hard disk

Memory type

- ① RAM:. Random Access Memory
  - sections



- Manufacture
  - RAM Base on Cap
    - Cap Charge = 1
    - Cap Discharge = 0
    - Called DDRAM

ex → use DDRAM in PC / laptop / cell Phone ⇐

↳ Adv → low cost
→ large size
→ 1GB / 32GB

↳ disAdva → Need the Perodic charger

↳ ManFacture

↳ Ram Based on transistor

↳ Bjt →

↳ Call SRAM
static Ram

↳ Adv → save Data

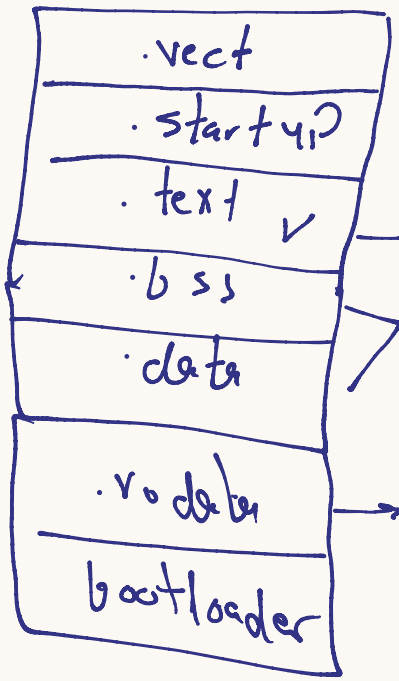
↳ dis → High cost

↳ low size

EX:. E.s devices
APPle Macbook ⇐

↳ ② ROM Read only Memory

↳ section →



→ Code Instruction

data Global

→ Const var

↳ Rom Manufacture

↳ Based on transistor (MOSFET)

↳ type

1. Masked ROM →
   ↳ buy memor & code
2. OTP → one Time Programmable
3. EPROM → Erasable Programmable ROM [UV]
4. EEPROM → Electrical Erasable P ROM
5. Flash Memory → write / Erase

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* Different between Flash / EEPROM

Flash

↳ Code only

↳ Can't Access During Runtime

↳ write :. Page size / word
#No of byte

↳ Erase :. Sector size
#No of Page

EEPROM ←

↳ For Code / For data

↳ Can Access During Runtime

↳ write → byte size

↳ Erase → byte size

↳ Current Post → detect floor

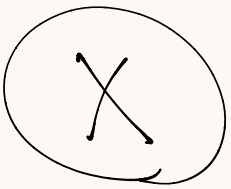
↳ Ram

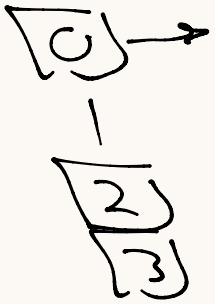
↳ screen → 0

الدور وقع

Current Post

↳ ROM | Flash →





EEPROM → ex for use EEPROM For Data

↳ Access Runtime

↳ Non volatile Memory.

IO | Memory

↳ it's Part From Peripherl

↳ H.W circuit

↳ Memory.