

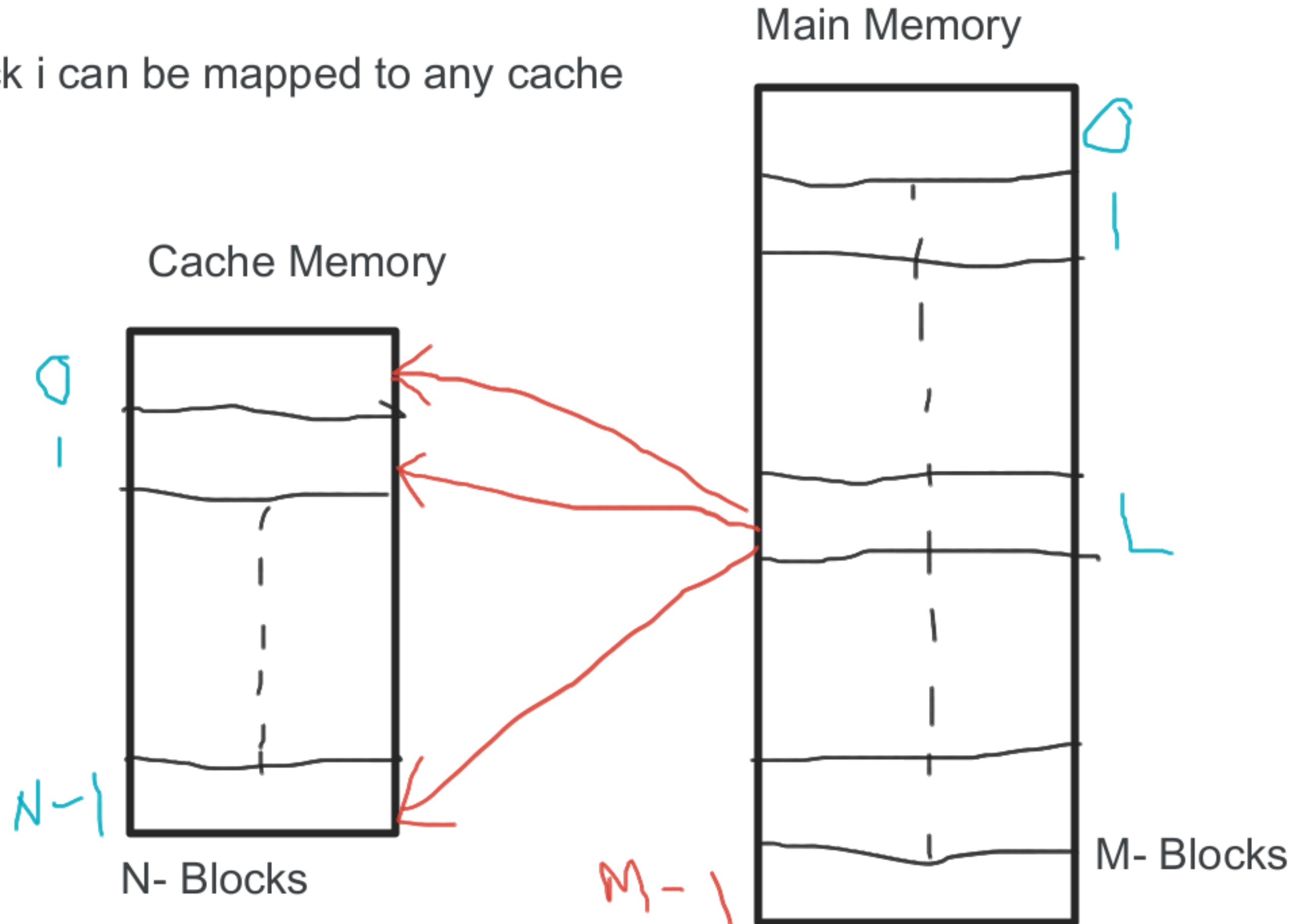
Fully Associative Mapping

main memory block i can be mapped to any cache block j

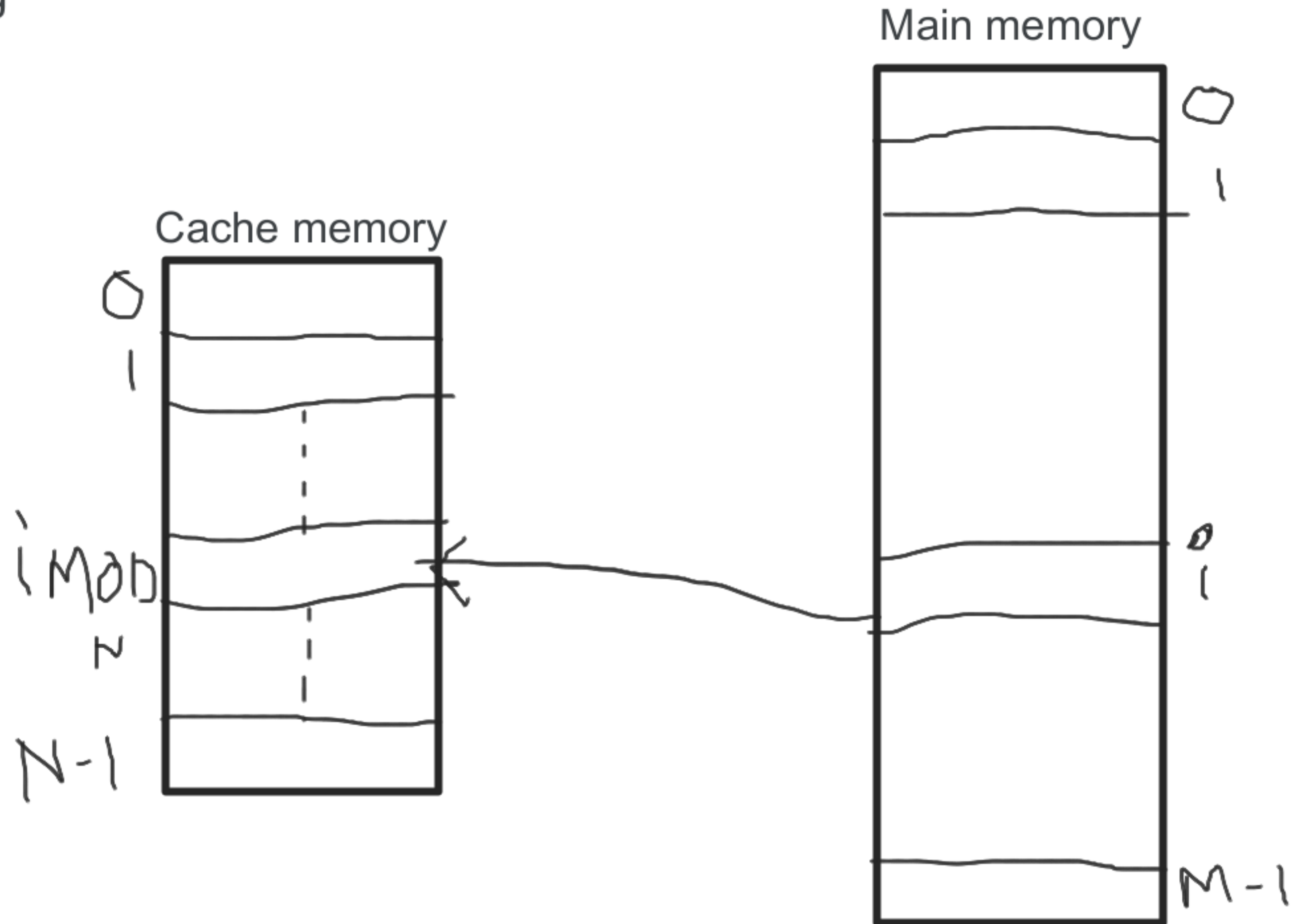
$$0 \leq i \leq M-1$$

$$0 \leq j \leq (N-1)$$

m -bits



Direct Mapping



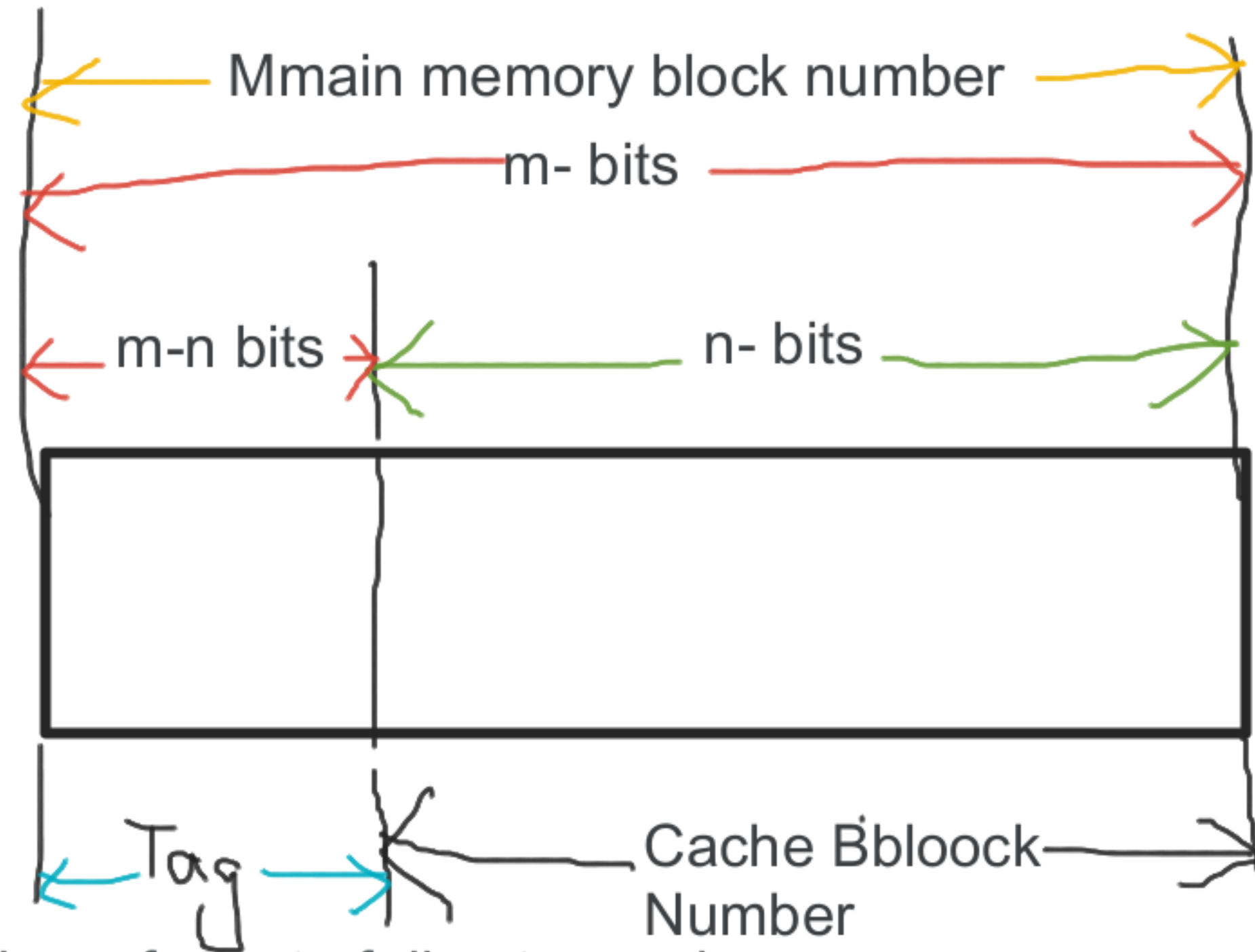
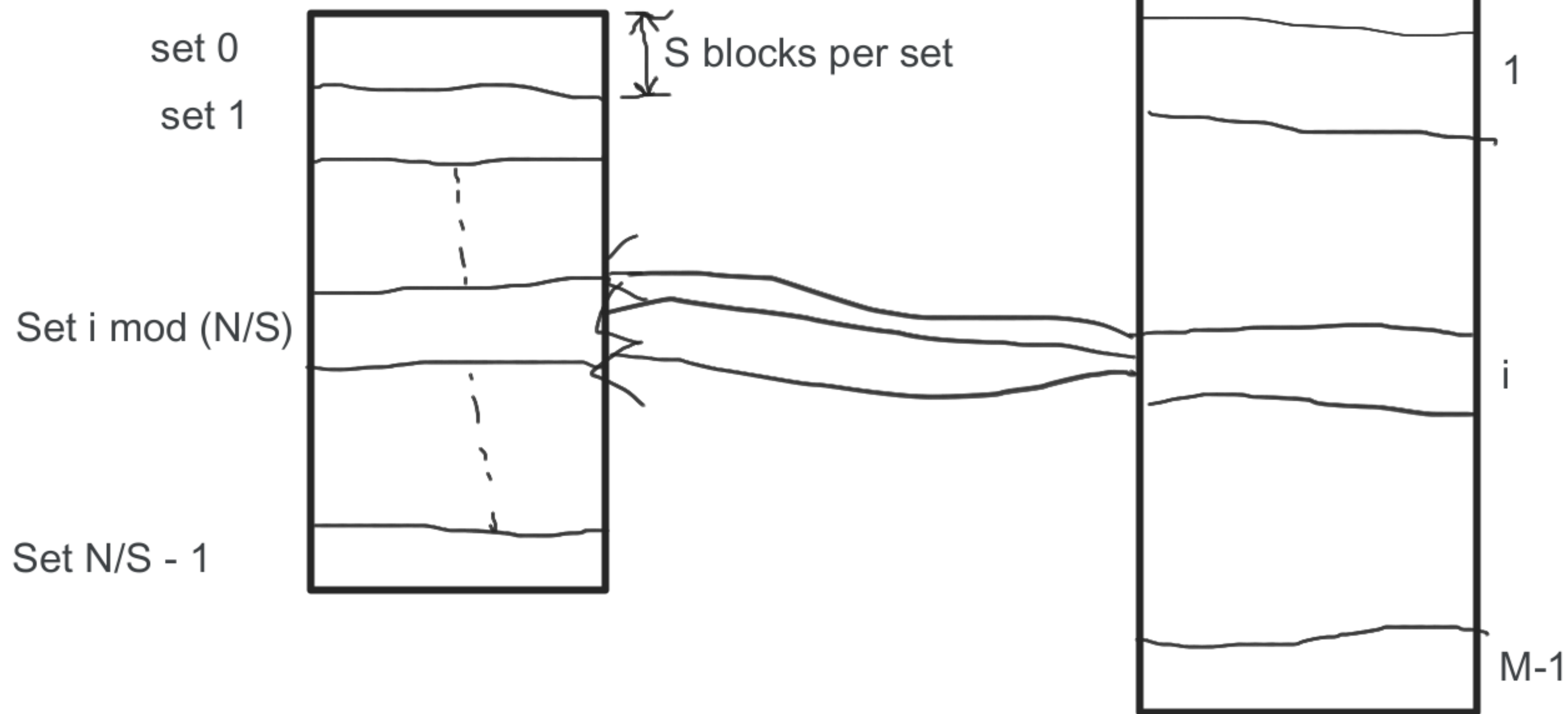


fig name : Address format of direct mapping

Set Associative Mapping

Main memory

Cache Memory



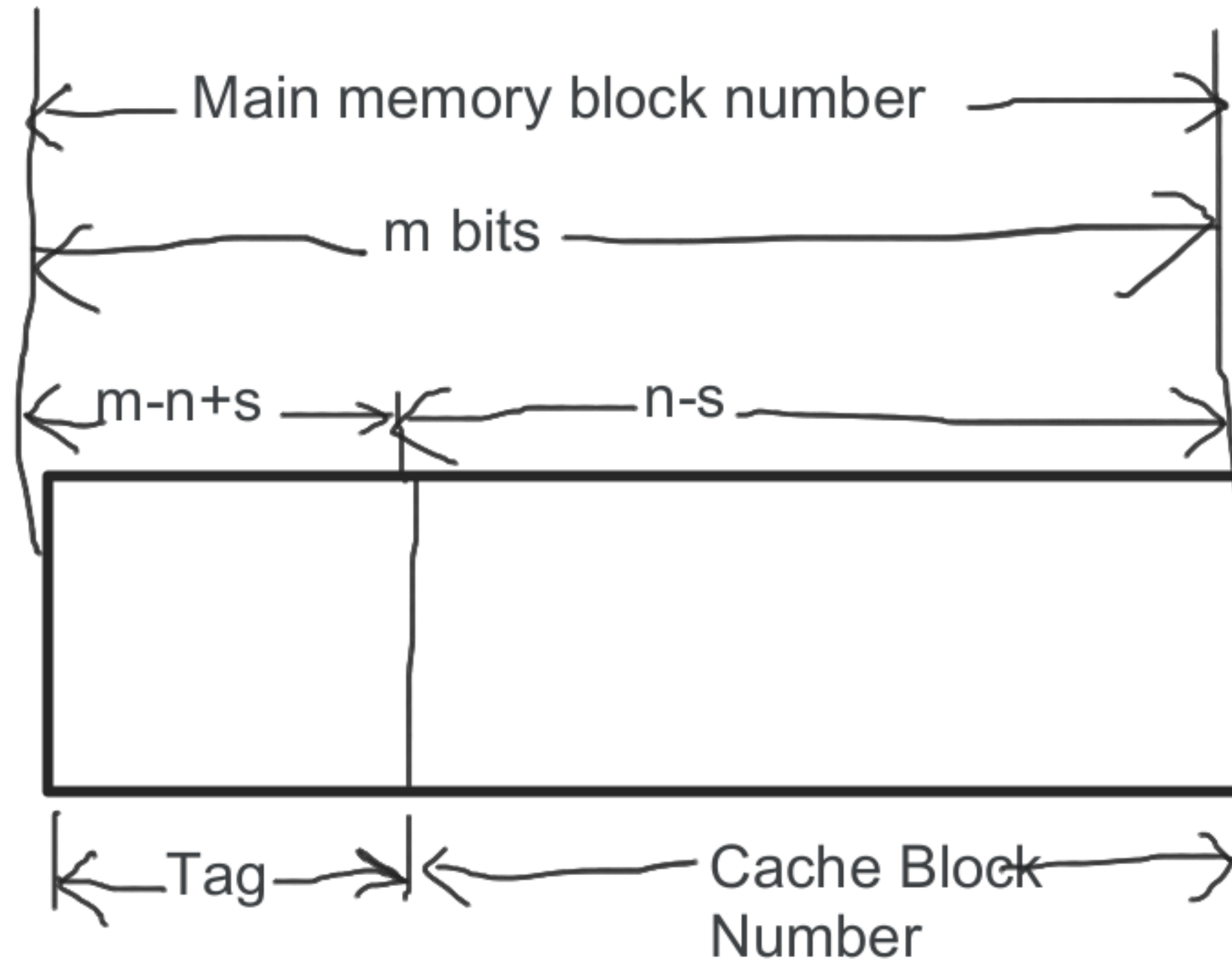


Fig Name : Adress format under set associative mapping

If $M=2^m$ M is total block of main
memory

$$N=2^n$$

Cache block per Set $S=2^s$

Range of 0 to $N/S - 1$

Tag will be $m - (n - s)$

generic model of an I/O module

Define I/O module

***des. I/O module

with Structure

diagram

** Draw Intel 82C55 A

Programmable

peripheral Interface

and describe this

Direct memory Access (DMA) with Diagram

Chapter 7

Input/Output

***8237 DMA system

Bus with diagram

*** Describe I/O Channel
characteristics with
diagram