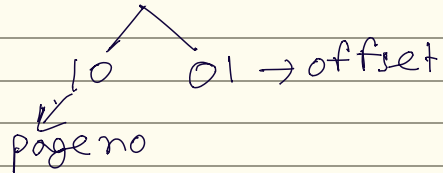


1. page size = 4 bytes \rightarrow offset = 2 bits

a) $9 = 1001$



physical address = $(11010)_2 = 53$

b) $2 = 010$

\rightarrow page# = 0 \rightarrow frame# = 4

\therefore physical address = $(10010)_2 = 18$

c) $35 = 100011$ offset

\rightarrow page# \rightarrow invalid

d) $10 = 1010$ offset

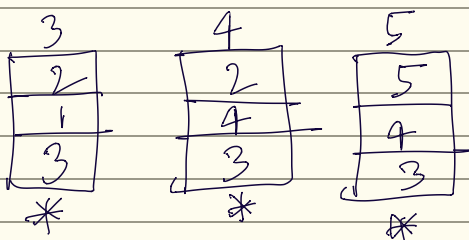
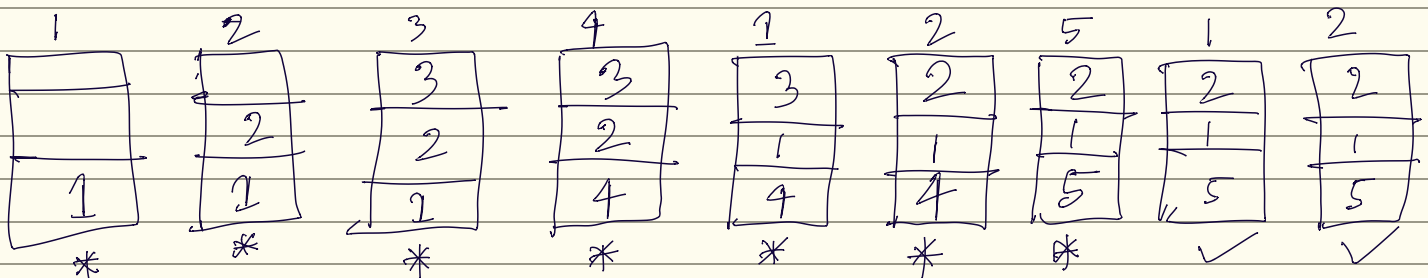
\rightarrow page#

P.A. = $(110110)_2 = 54$

e) $16 = 10000$ offset

\therefore P.A. = $(100100)_2 = 36$

2. LRU



hits = 2
miss = 10

Optimal

