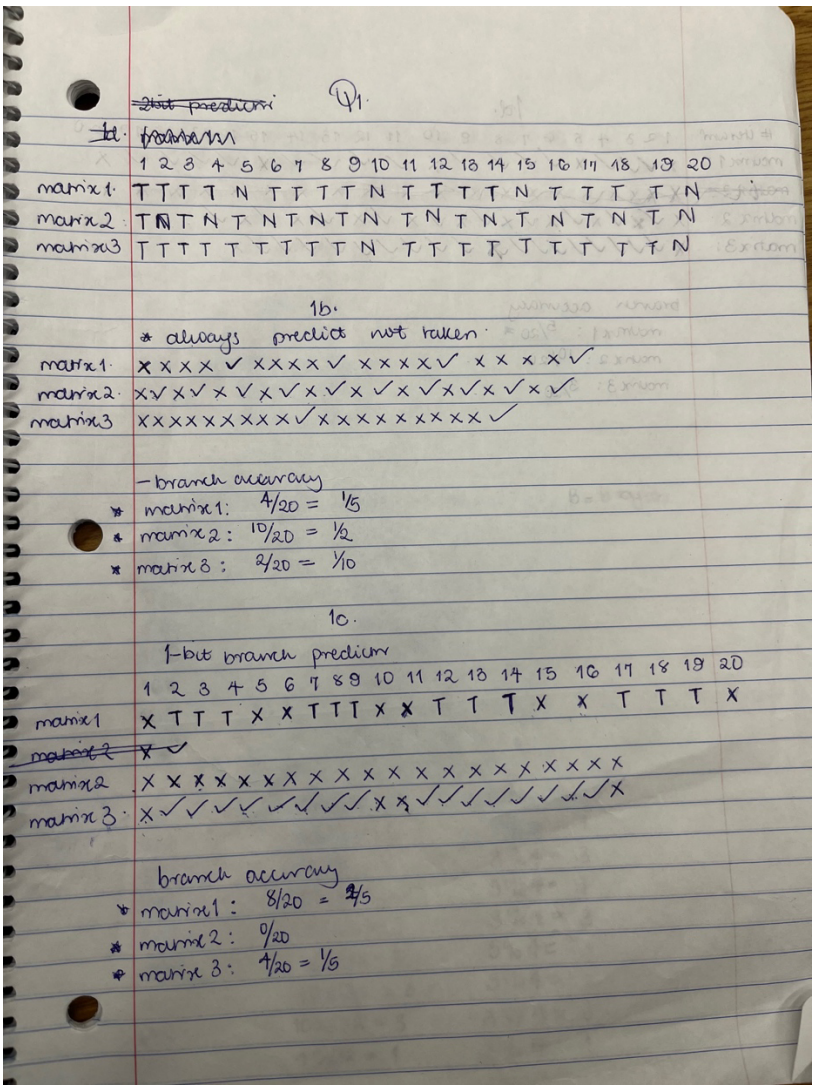
EMMANUELLA EYO EEE917 11291003 CMPT 215

1.



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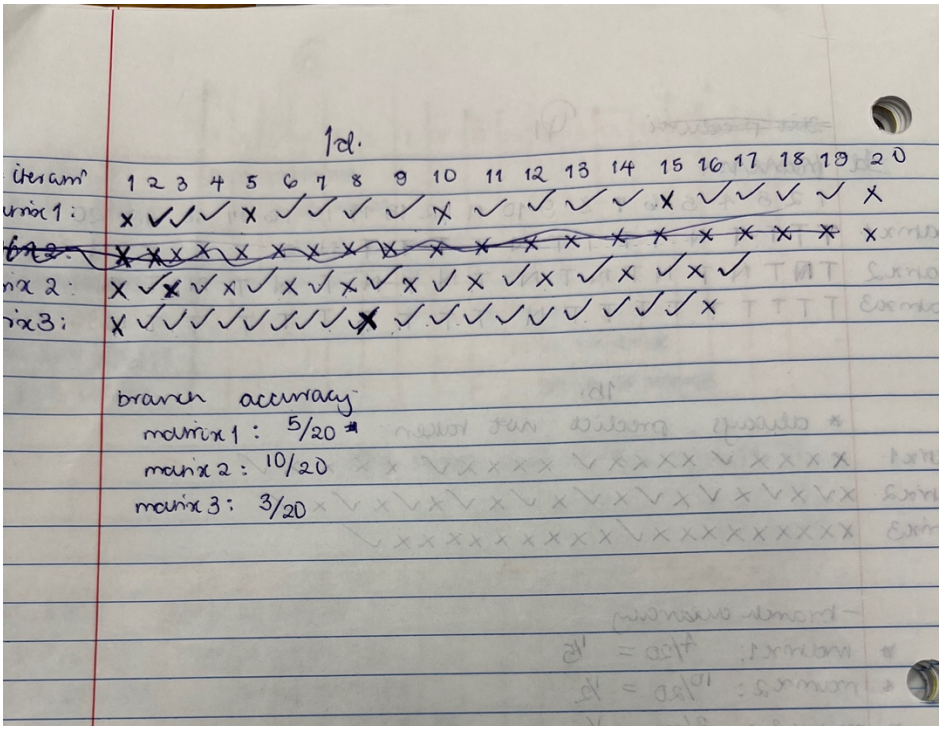

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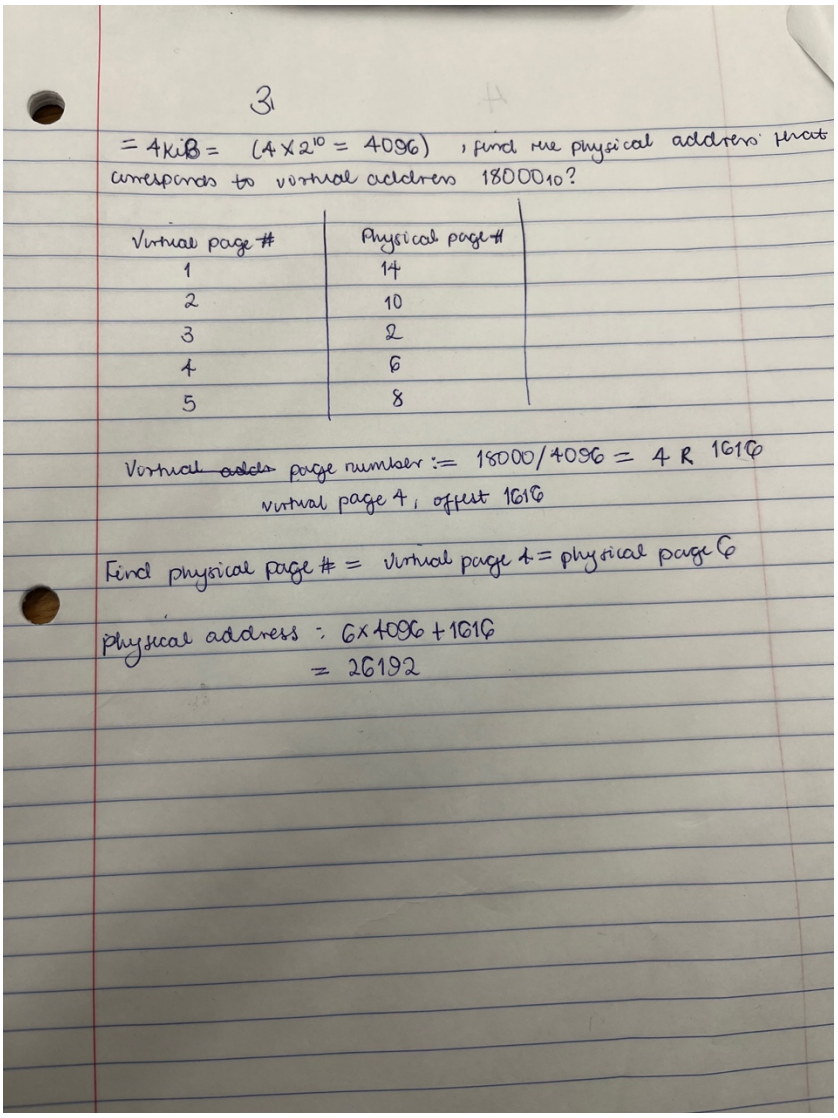
2.

Address	Block # (4 bytes)	Block # (8 bytes)	Cache position (32 * 4- bytes)	Cache set (16*8-byte 2-way SA) 16/2=8 sets	Cache outcome (32*4-byte)	Cache outcome (16*8-byte 2-way SA) 16/2 = 8 sets
44	44/4=11	44/8=5	11%32=11	5%8=5	Miss	Miss
100	100/4=25	100/8=12	25%32=25	12%8=4	Miss	Miss
164	164/4=41	164/8=20	41%32=9	20%8=4	Miss	Miss
110	110/4=27	110/8=13	27%32=27	13%8=5	Miss	Miss
166	166/4=41	166/8=20	41%32=9	20%8=4	Hit	Hit
168	168/4=42	168/8=21	42%32=10	21%8=5	Miss	Miss
102	102/4=25	102/8=12	25%32=25	12%8=4	Miss	Hit
46	46/4=11	46/8=5	11%32=11	5%8=5	Hit	Hit



3

= 4KiB = $(4 \times 2^{10} = 4096)$, find the physical address that corresponds to virtual address 18000_{10}?

Virtual page #	Physical page #
1	14
2	10
3	2
4	6
5	8

Virtual ~~addr~~ page number := 18000/4096 = 4 R 1616

virtual page 4, offset 1616

Find physical page # = virtual page 4 = physical page 6

physical address : $6 \times 4096 + 1616$

$= 26192$