Que 1 A[3,2] where base address is 1000 and width is 2. then calculate the memory address of location L(1,0) using (RMO).

$$Loc(A[1,1]) = 1000 + 2[2 \times (1-0) + (1-0)]$$
$$= 1000 + 2(2 \times (1) + (1))$$
$$= 1000 + 2(2+1)$$
$$= 1000 + 2(3)$$
$$= 1000 + 6$$
$$= 1006$$

location of A[3,2] = 1006

Que 2 A[3,2] where base address is 1000 and width is 2 then calculate the memory address of location L(2,0) using (RMO)

$$Loc(A[2,0]) = 1000 + 2[2 \times (2-0) + (0-0)]$$
$$= 1000 + 2[2 \times (2) + (0)]$$
$$= 1000 + 2(4+0)$$
$$= 1000 + 8$$
$$= 1008$$

location of A[2,0] = 1008

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Qu3 A = [-2...2, 3...7] of element the Starting location is 2000. Each element occupies two memory Cell. Calculate the location of A A[-1,4] using (RMO)

Loc (A[-1,4]) = 2000 + 2[5 x (-1-(-2)) + (4-3)]

= 2000 + 2[5x (1) + (1)]
= 2000 + 2[5 + 1]
= 2000 + 2(6]
= 2012

location of A[-1,4] = 2012

LOC (A[2,6]) = 2000 + 2[5x(2-(-2)) + (6-3)]
= 2000 + 2[5x(4) + (3)]
= 2000 + 2[20+3]
= 2000 + 2[23]
= 2046

Location of A[2,6] = 2046

Loc (A[0,6]) = 2000 + 2[5x(0-(-2)) + (6-3)]
= 2000 + 2[5x(2) + (3)]
= 2000 + 2[10 + 3]
= 2000 + 2[13]
= 2026

location of A[0,6] = 2026