$x = 4$, $y = 5$, $z = 1$

$L_1 = \min(x, y) = 4$

$L_2 = \min(x, z) = 1$

$L_3 = \min(y, z) = 1$

$U_1 = \max(x, y) = 6$

$U_2 = \max(x, z) = 5$

$U_3 = \max(y, z) = 6$

$$I = \frac{L_1 + U_1}{2} = \frac{4+6}{2} = 5$$

$$J = \frac{L_2 + U_2}{2} = \frac{1+5}{2} = 3$$

$$K = \frac{L_3 + U_3}{2} = \frac{1+6}{2} = \left\lfloor \frac{7}{2} \right\rfloor = 3$$

M [5] [3] [3]

$S_1 = 4$

$S_2 = (U_1 - L_1 + 1) \times S_1 = [6 - 4 + 1] \times 4 = 12$

$S_3 = (U_2 - L_2 + 1) \times S_2 = [5 - 1 + 1] \times 12 = 60$

Column Major.

Major address of (M) $+ (I - L_1) \times S_1 + (J - L_2) \times S_2 + (K - L_3) \times S_3$

Column

$= 0 + (5 - 4) \times 4 + (3 - 1) \times 12 + (3 - 1) \times 60$

Column Major

$4 + 24 + 2 \times 60 = \boxed{148.}$

Column Major

Row

Row Major

$S_3 = 4$

$S_2 = (U_3 - L_3 + 1) \times S_3 = (6 - 1 + 1) \times 4 = 24$

$S_1 = (U_2 - L_2 + 1) \times S_2 = (5 - 1 + 1) \times 24 = 120$

M [5] [3] [3]

address of (M) $+ (I - L_1) \times S_1 + (J - L_2) \times S_2 + (K - L_3) \times S_3$

$= 0 + (5 - 4) \times 120 + (3 - 1) \times 24 + (3 - 1) \times 4$

$0 + 120 + 48 + 8 = \boxed{176.}$

```
Valores segun el carnet
X = 4
Y = 5
Z = 1
```

Resumen en limpio de los valores obtenidos.

L1 = 4
L2 = 1
L3 = 1

U1 = 6
U2 = 5
U3 = 6

I = 5
J = 3
K = 3

b) Dirección de M[5][3][3] en Column Major

S1 = 4
S2 = 12
S3 = 60

addresof(M) + (I-L1)*S1 + (J-L2)*S2 + (K-L3)*S3
= 0 + (5-4)*4 + (3-1)*12 + (3-1)*60
= 4 + 24 + 120

= 148

a) Dirección de M[5][3][3] en Row Major

S3 = 4
S2 = 24
S1 = 120

addresof(M) + (I-L1)*S1 + (J-L2)*S2 + (K-L3)*S3
= 0 + (5-4)*120 + (3-1)*24 + (3-1)*4
= 120 + 48 + 8

= 176

End of document