Exemple 1 : Compression de la matrice M

|  |  |  |
| --- | --- | --- |
| 6.9 | 2.5 | 5.3 |
| 4.1 | 3.7 | 1.2 |

M =

I [1.2, 6.9]

* Nombre de niveau : n = 3
* Pas de quantification :
  + Delta (D) = 6.9 – 1.2 / 3
  + D = 1.9
* Sous intervalles et quantification

|  |  |  |
| --- | --- | --- |
| k | Ik | vk |
| 1 | [1.2, 3.1[ | 2.15 |
| 2 | [3.1, 5[ | 4.65 |
| 3 | [5, 6.9[ | 5.95 |

|  |  |  |
| --- | --- | --- |
| 3 | 1 | 3 |
| 2 | 2 | 1 |

* Matrice de quantification :

M =

Taille de compression : 2\*6= 12bits + 3\*8 = 24bits =🡺36bits

|  |  |  |
| --- | --- | --- |
| 5.95 | 2.15 | 5.95 |
| 4.05 | 4.05 | 2.15 |

Décompression :

M :

Exemple 2 : M

|  |  |  |  |
| --- | --- | --- | --- |
| 12 | 15 | 2.7 | 5.2 |
| 5 | 6 | 10 | 11.7 |
| 9 | 18 | 33 | 18.25 |
| -1 | 12 | 11 | 16 |
| 9 | 24 | 28 | 22.5 |
| 12 | -7 | -2 | 12 |
| -6 | 2 | 6 | 8 |
| 0 | 1 | 9 | 5 |

I [-7 ;33]

N = 4

D = 33 –(-7) / 4 = 10

D= b - a / n

Ik = [a+(k-1)D; a+kD[

vk=(2a + D(2k - 1)/2)

|  |  |  |
| --- | --- | --- |
| k | Ik | Vk |
| 1 | [ -7 ; 3 [ | -2 |
| 2 | 3 ;13 | 8 |
| 3 | 13 ;23 | 18 |
| 4 | 23 ;33 | 28 |

|  |  |  |  |
| --- | --- | --- | --- |
| 2 | 3 | 1 | 2 |
| 2 | 2 | 2 | 2 |
| 2 | 3 | 4 | 3 |
| 1 | 2 | 2 | 3 |
| 2 | 4 | 4 | 3 |
| 3 | 1 | 1 | 2 |
| 1 | 1 | 2 | 2 |
| 1 | 1 | 2 | 2 |

|  |  |  |  |
| --- | --- | --- | --- |
| 12 | 15 | 2.7 | 5.2 |
| 5 | 6 | 10 | 11.7 |
| 9 | 18 | 33 | 18.25 |
| -1 | 12 | 11 | 16 |
| 9 | 24 | 28 | 22.5 |
| 12 | -7 | -2 | 12 |
| -6 | 2 | 6 | 8 |
| 0 | 1 | 9 | 5 |