Questions à Choix Multiples / Multiple Choice Questions

Question 1:

Une matrice de taille nx = 1024 et ny = 1024 utilise une grille 2D avec des blocs de dimensions dimx = 16, dimy = 16. /
A matrix of size nx = 1024 and ny = 1024 uses a 2D grid with block dimensions dimx = 16, dimy = 16:
1. Quelles sont les dimensions de la grille (grid.x, grid.y) ? / What are the grid dimensions (grid.x, grid.y)?
2. Combien de threads au total sont lancés ? / How many total threads are launched?
Options / Choix:

a) grid.x = 64, grid.y = 64, Total threads = 65536

b) grid.x = 32, grid.y = 32, Total threads = 32768

c) grid.x = 16, grid.y = 16, Total threads = 8192

d) grid.x = 128, grid.y = 128, Total threads = 16384

Réponse / Answer: a) grid.x = 64, grid.y = 64, Total threads = 65536

Question 2:

Une matrice de taille nx = 2048 et ny = 1024 utilise une grille 2D avec des blocs de dimensions dimx = 32, dimy = 16. /
A matrix of size nx = 2048 and ny = 1024 uses a 2D grid with block dimensions dimx = 32, dimy = 16:
1. Quelles sont les dimensions de la grille (grid.x, grid.y) ? / What are the grid dimensions (grid.x, grid.y)?
2. Combien de threads au total sont lancés ? / How many total threads are launched?
Options / Choix:

a) grid.x = 64, grid.y = 32, Total threads = 65536

b) grid.x = 32, grid.y = 16, Total threads = 32768

c) grid.x = 64, grid.y = 64, Total threads = 131072

d) grid.x = 128, grid.y = 64, Total threads = 262144

Réponse / Answer: c) grid.x = 64, grid.y = 64, Total threads = 131072

Question 3:

Une matrice de taille nx = 8192 et ny = 8192 utilise une grille 2D avec des blocs de dimensions dimx = 64, dimy = 64. /

A matrix of size nx = 8192 and ny = 8192 uses a 2D grid with block dimensions dimx = 64, dimy = 64:

1. Quelles sont les dimensions de la grille (grid.x, grid.y) ? / What are the grid dimensions (grid.x, grid.y)?

2. Combien de threads au total sont lancés ? / How many total threads are launched?

Options / Choix:

a) grid.x = 128, grid.y = 128, Total threads = 134217728

b) grid.x = 64, grid.y = 64, Total threads = 16777216

c) grid.x = 256, grid.y = 256, Total threads = 67108864

d) grid.x = 512, grid.y = 512, Total threads = 268435456

Réponse / Answer: a) grid.x = 128, grid.y = 128, Total threads = 134217728

Question 4:

Une matrice de taille nx = 16384 et ny = 16384 utilise une grille 2D avec des blocs de dimensions dimx = 32, dimy = 32. /

A matrix of size nx = 16384 and ny = 16384 uses a 2D grid with block dimensions dimx = 32, dimy = 32:

1. Quelles sont les dimensions de la grille (grid.x, grid.y) ? / What are the grid dimensions (grid.x, grid.y)?

2. Combien de threads au total sont lancés ? / How many total threads are launched?

Options / Choix:

a) grid.x = 512, grid.y = 512, Total threads = 268435456

b) grid.x = 256, grid.y = 256, Total threads = 67108864

c) grid.x = 128, grid.y = 128, Total threads = 16777216

d) grid.x = 64, grid.y = 64, Total threads = 4194304

Réponse / Answer: a) grid.x = 512, grid.y = 512, Total threads = 268435456