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État	Terminé
Terminé le	mercredi 25 novembre 2020, 16:28
Temps mis	18 min 3 s
Points	10,00/10,00
Note	20,00 sur 20,00 (100%)

Question 1

Correct

Note de 1,00 sur 1,00

What is a GPU?

Veuillez choisir une réponse :

☐

a. A processor dedicated to graphics that cannot perform computation but transfer the images to the screen

☒

b. A processor dedicated to graphics that can also be used for computation ✓

☐

c. A special computer dedicated to video games

☐

d. A special that can transfer data across memory very fast

Votre réponse est correcte.

La réponse correcte est : A processor dedicated to graphics that can also be used for computation

Question 2

Correct

Note de 1,00 sur 1,00

What does cudaMalloc do?

Veuillez choisir une réponse :

☐

a. It transfers data on the GPU.

☐

b. It allocates a GPU.

☒

c. It allocates memory on the GPU. ✓

Votre réponse est correcte.

La réponse correcte est : It allocates memory on the GPU.

Question **3**

Correct

Note de 1,00 sur 1,00

When cudaMemcpy should be used?

Veillez choisir une réponse :

- ☒ a. To transfer between host and device (in both ways). ✓
- ☐ b. Only to transfer to main memory.
- ☐ c. Only to transfer from host to device.
- ☐ d. Only to transfer from device to host.

Votre réponse est correcte.

La réponse correcte est : To transfer between host and device (in both ways).

Question **4**

Correct

Note de 1,00 sur 1,00

What is blockDim?

Veillez choisir une réponse :

- ☐ a. The size of a thread group.
- ☐ b. The dimension of a group.
- ☒ c. The number of groups in 3D. ✓
- ☐ d. The number of threads on the GPU.

Votre réponse est correcte.

La réponse correcte est : The number of groups in 3D.

Question **5**

Correct

Note de 1,00 sur 1,00

What is blockIdx?

Veillez choisir une réponse :

- ☐ a. The dimension of the grid.
- ☐ b. The id of the current thread.
- ☒ c. The index of the thread group in the grid. ✓
- ☐ d. The dimension of the current group.

Votre réponse est correcte.

La réponse correcte est : The index of the thread group in the grid.

Question **6**

Correct

Note de 1,00 sur 1,00

What is blockDim?

Veillez choisir une réponse :

- ☒ a. The number of thread in a group. ✓
- ☐ b. The id of the current thread.
- ☐ c. The dimension of the grid.

Votre réponse est correcte.

La réponse correcte est : The number of thread in a group.

Question **7**

Correct

Note de 1,00 sur 1,00

What is threadIdx?

Veillez choisir une réponse :

- ☐ a. The global index of the thread in the grid.
- ☒ b. The local index of the thread in the group. ✓

Votre réponse est correcte.

Question **8**

Correct

Note de 1,00 sur 1,00

Consider that the grid/groups are in 1D. What is the formula to obtain a unique global index for each thread?

Veillez choisir une réponse :

- ☐ a. $\text{threadIdx.x} * \text{gridDim.x} + \text{threadIdx.y}$
- ☐ b. $\text{threadIdx.x} * \text{gridDim.x} + \text{threadIdx.x}$
- ☐ c. $\text{blockIdx.y} * \text{blockDim.y} + \text{threadIdx.y}$
- ☒ d. $\text{blockIdx.x} * \text{blockDim.x} + \text{threadIdx.x}$ ✓

Votre réponse est correcte.

La réponse correcte est : $\text{blockIdx.x} * \text{blockDim.x} + \text{threadIdx.x}$

Question **9**

Correct

Note de 1,00 sur 1,00

The number of threads/groups on a GPU is:

Veillez choisir une réponse :

- ☐ a. The number of groups is limited, but not the number of threads.
- ☒ b. Both are limited. ✓
- ☐ c. Unlimited.
- ☐ d. The number of threads is limited, but not the number of groups.

Votre réponse est correcte.

La réponse correcte est : Both are limited.

Question **10**

Correct

Note de 1,00 sur 1,00

Select all valid sentences

Veillez choisir au moins une réponse :

- ☐ a. GPGPU means Graphic Programming on GPU
- ☐ b. OpenCL cannot be used on GPU
- ☐ c. GPU is well-designed to process sparse/irregular data
- ☒ d. GPGPU means General Purpose computing onGPU ✓
- ☐ e. CUDA is a new language
- ☒ f. CUDA is a language extension to C/C++ ✓
- ☒ g. GPU is well-designed to process dense/contiguous data ✓
- ☐ h. Computing on GPU is always faster than on CPU

Votre réponse est correcte.

Les réponses correctes sont : GPGPU means General Purpose computing onGPU, CUDA is a language extension to C/C++, GPU is well-designed to process dense/contiguous data

◀ subject

Aller à... ▾

Subject ▶