Report.1.OpenMP

Phan Minh Duong

November 2020

1 Source code

```
void Labwork::labwork2_GPU() {
    int nDevices = 0;
    // get all devices
    cudaGetDeviceCount(&nDevices);
    printf("Number total of GPU : %d\n\n", nDevices);
    for (int i = 0; i < nDevices; i++){
        // get informations from individual device
        cudaDeviceProp prop;
        cudaGetDeviceProperties(&prop, i);
        // something more here
        printf("GPU name is %s\n",prop.name);
        printf("GPU clock is %d\n",prop.clockRate);
        printf("GPU multi processor count is %d\n",prop.multiProcessorCount);
        printf("GPU core count is %d\n",getSPcores(prop));
        printf("GPU Warp size is %d\n", prop.warpSize);
        printf("------------------\n");
        printf("GPU Memory clock rate is %d\n", prop.memoryClockRate);
        printf("GPU Memory bus width: %d\n", prop.memoryBusWidth);
        printf("------------------\n");
        printf("\n");
    }

}
```

2 Result

```
Starting labwork 2
Number total of GPU : 2

GPU name is Tesla K40c
GPU clock is 745000
GPU multi processor count is 15
```

```
GPU core count is 2880
GPU Warp size is 32
------------------
GPU Memory clock rate is 3004000
GPU Memory bus width: 384
------------------

GPU name is GeForce GTX TITAN Black
GPU clock is 980000
GPU multi processor count is 15
GPU core count is 2880
GPU Warp size is 32
------------------
GPU Memory clock rate is 3500000
GPU Memory bus width: 384
------------------

labwork 2 ellapsed 1.1ms
```