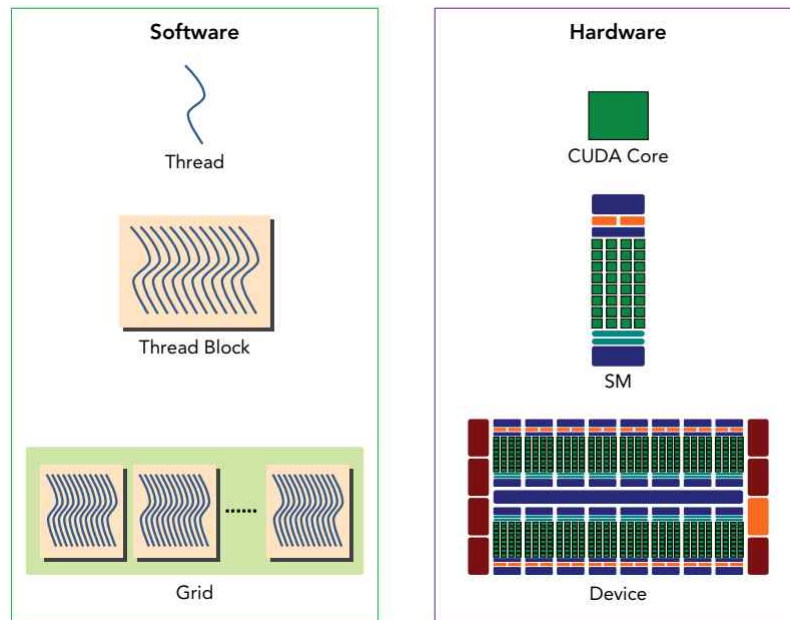


1. nvidia utility
 - nvidia-smi
 - sample >> deviceQuery
2. Host (CPU) <-> Device (GPU)
3. Thread << Block << Grid

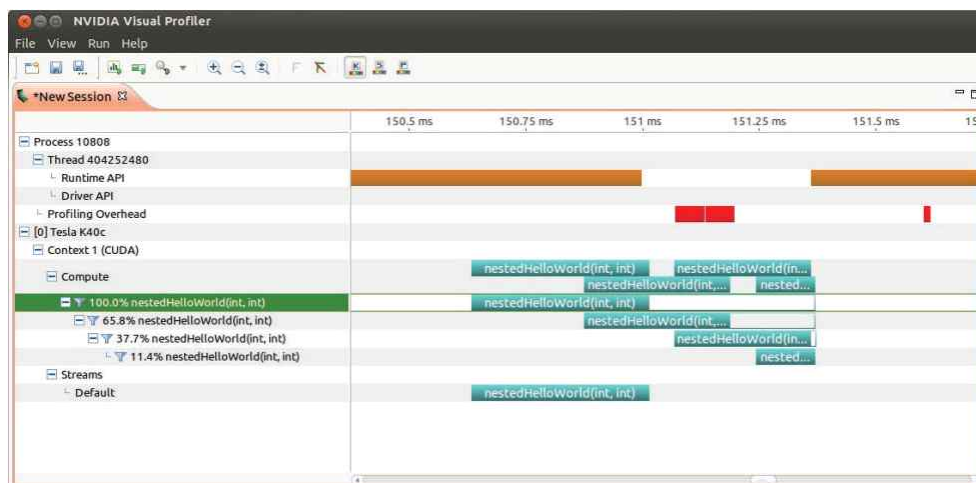


- dim3 grid: // grid.z, grid.y, grid.x
- dim3 block: // block.z, block.y, block.x

4. Kernel<<<grid, block>>>(var1, var2)
 - debugging kernel function


```
nvprof --metrics branch_efficiency ./simpleDiv
```

 - debugging by GUI
 - ```
nvvp ./simpleDiv
```



5. Reduction Problem (page. 132)

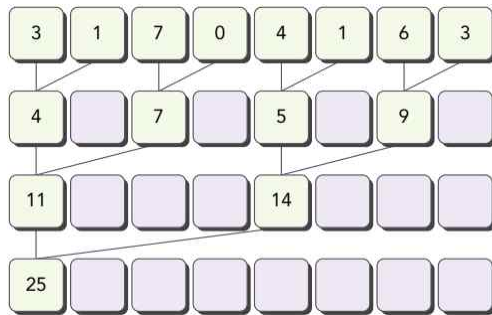


그림 1. Neighbored Pair.

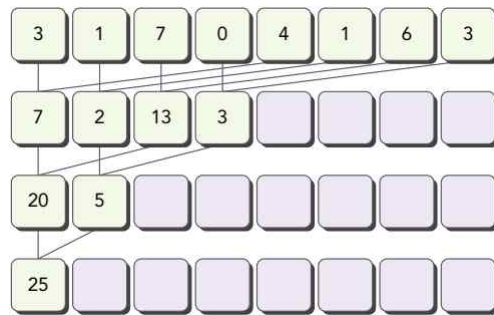


그림 2. Interleaved Pair.

```
- nvcc -O3 -arch=sm_20 reduceInteger.cu -o reduceInteger
- result
cpu reduce elapsed 0.029138 sec cpu_sum: 2139353471
gpu Neighbored elapsed 0.011722 sec gpu_sum: 2139353471 <<<grid 32768
block 512>>>
gpu Interleaved elapsed 0.006967 sec gpu_sum: 2139353471 <<<grid 32768
block 512>>>
```