

## CHECK NUMBER OF GPUS AVAILABLE IN YOUR LAPTOP

```
(base) C:\Users\user>nvidia-smi
```

Fri Oct 15 09:45:40 2021

```

=====
| NVIDIA-SMI 471.41           Driver Version: 471.41           CUDA Version: 11.4           |
|-----+-----+-----+-----+-----+-----+-----+-----+
| GPU   Name                   TCC/WDDM | Bus-Id                  Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf  Pwr:Usage/Cap |      Memory-Usage | GPU-Util  Compute M. |
|                               |                      |              MIG M. |
|=====+=====+=====+=====+=====+=====+=====+=====+
|  0   NVIDIA GeForce ... WDDM | 00000000:01:00.0 Off |          N/A         |
| N/A   0C    P8     13W /  N/A | 161MiB / 8192MiB |      0%      Default |
|                               |                      |                      N/A |
|=====+=====+=====+=====+=====+=====+=====+=====+

```

## Processes:

```

=====
GPU      GI      CI      PID      Type      Process name      GPU Memory
      ID      ID
=====
No running processes found
=====

```

```
NVIDIA-SMI 331.62      Driver Version: 331.62
```

GPU	Name	Persistence-M	Bus-Id	Disp.A	Volatile	Uncorr. ECC
Fan	Temp	Perf	Pwr:Usage/Cap	Memory-Usage	GPU-Util	Compute M.
0	Tesla K20m	Off	0000:03:00.0	Off	0	
N/A	27C	P0	46W / 225W	142MiB / 4799MiB	0%	Default
1	Tesla K20m	Off	0000:81:00.0	Off	0	
N/A	26C	P0	48W / 225W	19MiB / 4799MiB	99%	Default

Compute processes:

GPU	PID	Process name	Usage
0	101459	./simpleMultiGPU	134MiB
1	101459	./simpleMultiGPU	134MiB

```
Every 0.1s: nvidia-smi                                     Sat Jul 30 22:05:37 2016
Sat Jul 30 22:05:37 2016
+-----+
| NVIDIA-SMI 352.63      Driver Version: 352.63          |
+-----+
| GPU  Name      Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf  Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
| 0  GeForce GTX TIT...  Off | 0000:02:00.0  Off |           N/A |
| 41%  81C    P2    159W / 250W | 616MiB / 12287MiB |    86%    Default |
+-----+-----+
| 1  GeForce GTX TIT...  Off | 0000:03:00.0  Off |           N/A |
| 22%  34C    P8    16W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
| 2  GeForce GTX TIT...  Off | 0000:82:00.0  Off |           N/A |
| 22%  33C    P8    15W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
```

Hotter GPU, because 81 Centigrade more temperature

Cooler GPU, because 34 C (Centigrade)

```
Every 0.1s: nvidia-smi                                     Sat Jul 30 22:05:37 2016
Sat Jul 30 22:05:37 2016
+-----+
| NVIDIA-SMI 352.63      Driver Version: 352.63          |
+-----+
| GPU  Name      Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf  Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
| 0  GeForce GTX TIT...  Off | 0000:02:00.0  Off |           N/A |
| 41%  81C    P2    159W / 250W | 616MiB / 12287MiB |    86%    Default |
+-----+-----+
| 1  GeForce GTX TIT...  Off | 0000:03:00.0  Off |           N/A |
| 22%  34C    P8    16W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
| 2  GeForce GTX TIT...  Off | 0000:82:00.0  Off |           N/A |
| 22%  33C    P8    15W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
```

It is hot GPU, because 41% is depend on Fan

It is cooler GPU, because it is depend on 22% on Fan

```
Every 0.1s: nvidia-smi                                     Sat Jul 30 22:05:37 2016
Sat Jul 30 22:05:37 2016
+-----+
| NVIDIA-SMI 352.63      Driver Version: 352.63          |
+-----+
| GPU  Name      Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp  Perf  Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
| 0  GeForce GTX TIT...  Off | 0000:02:00.0  Off |           N/A |
| 41%  81C    P2    159W / 250W | 616MiB / 12287MiB |    86%    Default |
+-----+-----+
| 1  GeForce GTX TIT...  Off | 0000:03:00.0  Off |           N/A |
| 22%  34C    P8    16W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
| 2  GeForce GTX TIT...  Off | 0000:82:00.0  Off |           N/A |
| 22%  33C    P8    15W / 250W | 23MiB / 12287MiB |     0%    Default |
+-----+-----+
```

power wattage

power wattage

```
Every 0.1s: nvidia-smi                               Sat Jul 30 22:05:37 2016
Sat Jul 30 22:05:37 2016
+-----+
| NVIDIA-SMI 352.63      Driver Version: 352.63      |
+-----+-----+
| GPU  Name           Persistence-M| Bus-Id        Disp.A | Volatile Uncorr. ECC |
| Fan  Temp   Perf    Pwr:Usage/Cap|      Memory-Usage | GPU-Util  Compute M. |
+-----+-----+
|  0  GeForce GTX TIT...  Off   | 0000:02:00.0  Off  |           N/A       |
| 41%   81C    P2     159W / 250W | 616MiB / 12287MiB |    86%    Default   |
+-----+-----+
|  1  GeForce GTX TIT...  Off   | 0000:03:00.0  Off  |           N/A       |
| 22%   34C    P8      16W / 250W |  23MiB / 12287MiB |     0%    Default   |
+-----+-----+
|  2  GeForce GTX TIT...  Off   | 0000:82:00.0  Off  |           N/A       |
| 22%   33C    P8      15W / 250W |  23MiB / 12287MiB |     0%    Default   |
+-----+-----+
```

GPU amount of  
Utilization