





**Assignment # 2****Question # 1:**

Write 5-Latest GPU information 2023 which includes:

Specification	Core	Memory	Company	PricePkr	Revolution	Launch Date	Diagram
<b>RX 7800 XT</b>	1,295 MHz	16GB GDDR6	AMD Radeon	144,420.98	Powering the Future of 1440p Gaming	September 6, 2023	
<b>RTX 4070</b>	1,920 MHz	12GB GDDR6 X	Nvidia	210,000	the renders will be faster and you can do more effects and have larger scenes	April 12, 2023	
<b>RTX 4070 Ti</b>	7680 CUD A cores	12 GB GDDR6 X	Nvidia	295,000	20 percent faster at 1440p.	January 5th, 2023	
<b>RX 7600</b>	1,720 MHz	8GB GDDR6	AMD Radeon	105,099.00	enhanced streaming quality and performance with improved AMD encoders	May 25, 2023.	

**Question # 2:****a. What are CPU Generation?**

CPU generations refer to the different iterations or versions of central processing units (CPUs) produced by semiconductor manufacturers like Intel and AMD. Each new generation typically brings improvements in performance, power efficiency, and features compared to the previous generation.

**b. What are these generation?**

The "2nd gen," "3rd gen," "5th gen," and so on, are specific generations of CPUs produced by companies like Intel. These numbers indicate the iteration or version of the CPU architecture.

**For example:**

1. **2nd Gen:** This might refer to the second generation of Intel's Core processors, like the Intel Core i5-2500K.
2. **3rd Gen:** The third generation of Intel Core processors, such as the Intel Core i7-3770.
3. **5th Gen:** The fifth generation of Intel Core processors, like the Intel Core i7-5500U.

Each new generation typically brings improvements in performance, power efficiency, and new features. These improvements are achieved through advancements in semiconductor technology, architectural enhancements, and manufacturing processes. Buyers often look for the latest CPU generation to ensure they get the best performance and features available at the time of purchase.

These specific features and performance characteristics can vary widely between different generations and CPU models.

### **Question # 3 :**

#### **a. Quad Core:**

Quad core CPUs have four processing cores within a single microprocessor chip.

They can handle multiple tasks simultaneously, making them suitable for multitasking and demanding applications.

Some popular families of quad-core processors include:

- I. Intel Core i7 quad-core series (e.g., Core i7-7700K)
- II. AMD Ryzen quad-core series (e.g., Ryzen 5 3600)

#### **b. Dual Core:**

Dual core CPUs have two processing cores within a single microprocessor chip.

They are capable of handling basic multitasking and everyday computing tasks but may struggle with more resource-intensive applications.

Some families of dual-core processors include:

- I. Intel Core 2 Duo series (e.g., Core 2 Duo E8400)
- II. AMD Athlon X2 series (e.g., Athlon 64 X2 6000+)

It's important to note that the number of cores is just one factor in determining a processor's performance. Other factors like clock speed, cache size, and architecture also play a significant role in how well a CPU performs in various tasks