1 – **Hello, I will make a presentation about intel latest processor which is named « Alder Lake »**

2 – What is « Alder Lake » ?

It is the name of the 12th generation of intel processor that is now available since November the 4th, the 11th generation was out on March the 15th so it has only been 7 mounths between those two.

3 – What are the new processors lunched under Alder Lake ?

For now, there is only 3 differents processors available ;

The Core I9 represent the top of the line, the I7 for the midrange and the I5 for the low midrange. There is usually the I3 for the low end, but recently Intel seem to focus on higher grade processors.

4 – Advantages of this newest generation ?

This last generation of processor is very interesting for many reasons, first, the processor now have two different core :

- **The P-Core (Golden Cove)**
- **The E-Core (Gracemont)**

According to Intel, the P-Core is a high performance core that will be used for greedy tasks like for exemple gaming or 3D render. The E-Core is a less powerful core that will most of the time be used for smaller task on the background.

Second, the Alder Lake generation come with the new LGA-1700 socket that is exclusive to this generation and grant a bunch of speed amelioration compared to the last 1200 socket.

Thirdly, the DDR5 RAM is now usable with the 1700 socket, but also the older type of RAM, the DDR4, can be used. So the 1700 socket and the Intel 12th generation processor are most likely future proof since the DDR5 will gain in frequency power through time and will allow you to upgrade your computer without having to change the motherboard and other stuff.

- ➔ **Compare w/ last gen**
- ➔ **Graphic part (Benchmark perf)(benchmark conso)**

5 – Synthesis ?

- ➔ **Power efficiency improved but still behind AMD in general**
- ➔ **Average power increased, the I9-12900K take the lead of the power ranking**
- ➔ **Future proof with LGA 1700 socket ; but the cost is bigger for an upgrade**
- ➔ **Win11 optimised**
- ➔ **Top tier in gaming task**
- ➔ **The I5-12600K is the absolute king in terms of power/consomation/price**