**Recap Shell**

***Questions***

1. What’s a big advantage of using a shell?
2. List at least three different USB device classes.
3. How many times per second should we call the shell parse function at least, to avoid to lose messages?
4. If non-return-to-zero is used, what is special after 6 consecutive of 1 bits?
5. How fast should the bus clock be configured for using USB and why?

***Answers***

*@1) We have an easy and universal way to configure and inspect a target, even without debugging.*

*@2) USB device classes:*

* *Human interface device (HID)*
* *Communication device class (CDC)*
* *Mass storage class (MSC)*
* *Physical interface device (PID)*

*@3) 20 times per second*

*@4) an additional zero is inserted*

*@5) 24MHz: USB frequency is 12Mhz, in fact of Nyquist-Shannon, the bus clock should be twice as fast as the USB clock.*