

## SUMMARY

### ***FIRST HALF:***

- Started Interface Study :
  - I2C :
    - I<sup>2</sup>C (Inter-Integrated Circuit, *eye-squared-C*), alternatively known as I2C or IIC, is a synchronous, multi-controller/multi-target (master/slave), packet switched, single-ended, serial communication bus
    - It is widely used for attaching lower-speed peripheral ICs to processors and microcontrollers in short-distance, intra-board communication.
    - I<sup>2</sup>C is appropriate for peripherals where simplicity and low manufacturing cost are more important than speed.
    - A particular strength of I<sup>2</sup>C is the capability of a microcontroller to control a network of device chips with just two general-purpose I/O pins and software.
    - Many other bus technologies used in similar applications, such as Serial Peripheral Interface Bus (SPI), require more pins and signals to connect multiple devices.
  - I3C:
    - I3C is a specification to enable communication between computer chips by defining the electrical connection between the chips and signalling patterns to be used. Short for "Improved Inter Integrated Circuit"

- I3C uses same two signal pins as I<sup>2</sup>C, referred to as SCL (serial clock) and SDA (serial data).
- The primary difference is that I<sup>2</sup>C operates them as open-drain outputs at all time, so its speed is limited by the resultant slow signal rise time. I3C uses open-drain mode when necessary for compatibility, but switches to push-pull outputs whenever possible, and includes protocol changes to make it possible more often than in I<sup>2</sup>C

### ***SECOND HALF :***

- Learnt about Socket Programming in Python.
- Implemented Single Client Server program in Python
- Tried to Implement Multiple Client Server program in Python