**UART PROJECT DSD**

* to transmit a data packet between devices using Asynchronous and Serial communication
* The data length can vary from 5 bit to 8 bit but it must be decided before the communication begins along with the baud rate(in this case the baud rate is 115200)
* Hardware based digital communication protocol used to transmit data between two device at an agreeded upon baud rate and data length
* it used to transmit binary data serially starting from LSB to MSB in the form of data frames with a start bit and a stop bit
* Baud rate is the rate at which information is being share(in this case information is in terms of bits)
* Data frame is the arrangement of data packets with a start bit before the MSB and one or two stop bit at the end of data packet
* Start bit is a high-to-low pulse which indicates the start of the transmission and a stop bit is a High pulse to indicate the end of the operation

Applications :

* Interfacing of Sensors and communication modules to the microprocessor or microcontroller
* Transferring data through PC serial port
* Baud rate generation for numerous applications that helps to determine the speed of data transmission

< state diagram, etc are there in the repo>

<https://github.com/jayshah1x/iiitb_uarttx/tree/main>