

## UART Library

This library is used for communication between the ATmega2560 micro-controller and a PC using the UART protocol. On the ATmega2560 micro-controller, UART0 is responsible for the serial communication.

The following functions can be used to transmit and receive data using UART:

- **void uart0\_init()**
  - Description: Initializes UART0 and sets the baud rate to 9600.
  - Parameters: None
  - Returns: void
- **void uart\_tx(char data)**
  - Description: Transmits a byte of data of char type.
  - Parameters:
    - ◆ **data**: the byte of data which needs to be transmitted
  - Returns: void
- **void uart\_tx\_string(char \*data)**
  - Description: Transmits an entire string of characters. **NOTE:** To send a string to Python script, send an extra “\n” after the string. For example, if you want to send the string “e-Yantra”, you will use either `uart_tx_string(“e-Yantra\n”)`; or `uart_tx_string(“e-Yantra”)`; and `uart_tx_string(“\n”)`;
  - Parameters:
    - ◆ **data**: the address of string which needs to be transmitted
  - Returns: void