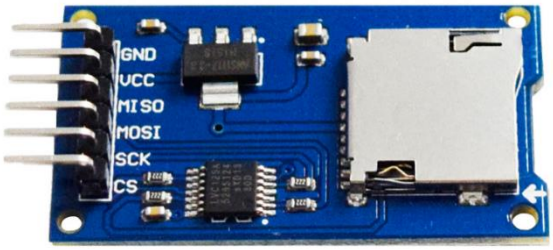
Instructions for Data Logging With Arduino

1. Insert the micro SD into the Robojax data logger
2. Connect the SD card module to your Arduino (D means digital pins)

```
GND  → GND
VCC  → 5V
CS   → D10
MOSI → D11
MISO → D12
CSK  → D13
```



For more info on SPI communication: https://www.arduino.cc/en/reference/SPI

3. Open the file SD_data_logger
4. Read the comments that explain each step of the data logging
5. The main steps:
    a. Import necessary libraries & declare variables
        i. You can change the name of the csv file, but it must have a maximum of 8 upper-case letters
    b. Setup
        i. Start the serial communication with the serial monitor
        ii. Initialize the SD card module
        iii. Create/open a .csv file and add some headers
        iv. Close the .csv file
    c. Loop
        i. `if (i < 10)`: will execute the loop 10 times
        Note: this is one way to ensure that the file is closed after collecting data. There may be other ways to achieve this but be careful never to remove the SD card if a file was not properly closed.
        ii. Measure the time since the beginning of the program (optional)
        iii. Print collected data to .csv file, and **close** the file
        iv. Display the data on serial monitor
        v. Increment the counter and delay (optional)
6. Compile & upload
7. After all iterations, the file is closed, and you can safely remove the SD card and insert it into a computer for data manipulation/visualization

More info on SD library and useful functions: https://www.arduino.cc/en/reference/SD