| 111103./                          | <u>, aocs</u>                   | .рурпскз.сопт/еп/з                               | Jilows Fy  | mon code milo for EVS i  | bricks, EVS Devices, Robotics, and much more:   |
|-----------------------------------|---------------------------------|--|--|--|---|
| Motors                            |                                 | Header Code Example ==> motor_A = Motor(Port.A)  |  |  |   |
|                                   | Func                            | run(speed)                                       |  |  | runs motor at a constant speed (degrees/sec)<br>medium motor speed up to 1000, large up to 800<br>Example ==> motor_A.run(200)  |
|                                   | Func                            | run_time(speed, time, then=Stop.HOLD, wait=True) |  |  | motor runs at a constant speed<br>for given time in ms<br>then stops and holds position<br>waits to finish (or not) before next instruction<br>Example ==> motor_A.run_time(200, 500) |
|                                   | Func                            | run_angle(speed, ro                              | otation_angle, then=   | Stop.HOLD, wait=True)  | motor runs at a constant speed<br>for a given angle<br>then stops and holds position<br>waits to finish (or not) before next instruction<br>Example ==> motor_A.run_angle(200, -180)  |
| Func run_target(speed, target_ang |                                 | arget_angle, then=Si                             | top.HOLD, wait=True)   | motor runs at given speed to target_angle target_angle then stops and holds position waits to finish (or not) before next instruction Example ==> motor_A.run_target(300, 180) |   |
|                                   | Func                            | Stopping stop()<br>brake()<br>hold()             | Stops the motor and lets it spin freely<br>Passively brakes the motor - gradually stop<br>Actively stops the motor - NOW |  | <pre>Example ==&gt; motor_A.stop()  motor_A.brake()  motor_A.hold()</pre>   |
| Robots                            |                                 | Header Code Example ==> robot                    |  | t = DriveBase(motor B,   | motor_C, wheel_diameter=55.9, axle_track=89.0)  |
|                                   | Func                            | straight(distance)                               |  | drives straight a given distance (mm) then stops  Example ==> robot.straight(200)  |   |
|                                   | Func                            | turn(angle)                                      |  | turns in place by a given angle (degrees)  Example ==> robot.turn(-90)   |   |
| Func drive                        |                                 | drive(drive_speed, turn_rate)                    |  | <pre>drives at speed (MM/sec) &amp; turn rate (deg/sec) Example ==&gt; robot.drive(-300, 45)</pre>   |   |
|                                   |                                 | stop()   | ор()   |  | stops by letting motors spin freely Example ==> robot.stop()  |
| Color Sensor                      |                                 | Header Code Example ==> senso                    |  | r_1 = ColorSensor(Port.  | S1)   |
|                                   | Func color()  Func reflection() |  | <pre>measures color of a surface Example ==&gt; print("color", sensor_1.color())</pre>                                   |  |   |
|                                   |                                 |  | measures reflection from surface using red light  Example ==> print("reflect", sensor_1.reflection())                    |  |   |