Quiz 9: Quadrature Encoder

Click here to refer to documentation related to the quadrature encoder.

1. Declare a global variable named **encoder**. This variable will store the current value of the quad encoder and ***must be updated in real-time and used inside your programming***.

2. Write a program that spins both motors at full speed **only** when the encoder reaches 250 in either direction but 'zeros' the encoder if the value exceeds 300 in either direction.

3. Write a program that spins both motors forward at full speed when the encoder reaches 150 in the positive direction, and reverses the motors at full speed when the encoder reaches 150 in the negative direction. *(Bonus: have the motors stop when the encoder value is at 0.)*
   a. Do not allow the value of the encoder to exceed 200 in either direction.