Hardware:

* Soldering

Firmware & Software:

# TASKS

## Motor control

* Assign required pins for encoder in psoc creator
* write functions: rotate(left/right) stop() move(speed), motor\_L/R(speed)
* move(speed) will combine motor\_L(speed) and motor\_R(speed) to move backwards and forwards with sensors\_read() to follow a straight line.
* if “speed” is negative, will move backwards

## Line follow

* sensors\_read() will output integers corresponding to scenarios

1. On line
2. drifted left
3. drifted right
4. Left turn detected
5. Right turn detected
6. Intersection detected
7. Lost

* Case statements as per sensor arrangement and each scenario telling motor control what to do
* sends signals like “steer left” or “steer right” to follow the line
* detects when left or right corner (or intersection) comes up