User manual:

The 3 scripts: PiAnalog1, PiAnalog 2 and Speedometer, need to be all located in the same folder, so that the imports used in the code could work.

The speedometer code is the main script, while the other two are sub-scripts. So in order to get your speedometer to work, you need to run the speedometer script.

Build your device using the pictures attached. You will need a phototransistor, two 1 kilo ohm resistors, 1 capacitor, 3 wires and 3 aligator clips for each breadboard.

Start line phototransistor: The 3 wires connecting the breadbored to the pi must be connected to ports 18, gnd and 23 respectively.

Finish line phototransistor: The 3 wires connecting the breadbored to the pi must be connected to ports 7, gnd and 8 respectively.

(This will be demonstrated on the pictures attached.)

Place your breadboards at the start and finish line. Do not forget to figure out the distance between your 2 points.

Insert your distance into the speedometer file, (it will have a note saying to change it). The default value is 1 meter.

Run the code.