PyBench Methods (v1.1 – 25 Jan 2017)

Methods	Purpose
pb.ok ( )	Return 1 (true) if PyBench board is working.
pb.set_sig_freq (f)	Set signal frequency to f. 0.1 Hz ≤ f ≤ 3000 Hz
pb.set_samp_freq (f)	Set sampling frequency to f. 1 Hz ≤ f ≤ 30,000 Hz
pb.set_max_v (v)	Set maximum amplitude to v. 0 ≤ v ≤ 3.3
pb.set_min_v (v)	Set minimum amplitude to v. 0 ≤ v ≤ 3.3
pb.set_duty_cycle (d)	Set duty cycle of a square signal to d. 0 ≤ d ≤ 100
pb.dc (v)	Output a dc voltage v. 0 ≤ v ≤ 3.3
pb.sine ( )	Output a sinusoidal signal at set signal frequency between max_v and min_v.
pb.triangle ( )	Output a triangular signal at set signal frequency between max_v and min_v.
pb.square ( )	Output a square signal at set signal frequency between max_v and min_v, with the set duty cycle.
v = pb.get_one ()	Capture one sample v from analogue input. 0 ≤ v ≤ 3.3
data = pb.get_block (n)	Capture n samples from analogue input. 0 ≤ data ≤ 3.3
data = pb.get_mic (n)	Capture n samples from microphone. 0 ≤ data ≤ 3.3
[p, r] = pb.get_accel ( )	Get pitch angle p and roll angle r from the IMU. -90 ≤ p, r ≤ +90
[dx, dy, dz] = pb.get_gyro ( )	Get accelerations (dx, dy, dz) in three axes from the IMU in degrees/sec.