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1  #Robot arm controls, FOUND HERE: https://sdurobotics.gitlab.io/ur\_rtde/examples/examples.html
2  import math
3  from shutil import move
4  import rtde_control
5  import time
6
7  rtde_c = rtde_control.RTDEControlInterface("192.168.245.143")
8  # Parameters
9  velocity = 0.5
10 acceleration = 0.5
11 dt = 1.0/500 # 2ms
12 lookahead_time = 0.1
13 gain = 300
14 joint_q = [-0.143, -0.435, 0.20, -0.001, 3.12, 0.04]
15 # Move to initial joint position with a regular moveJ
16 rtde_c.moveL(joint_q, 0.5, 0.3)
17 #rtde_c.moveL([-1.54, -1.83, -2.28, -0.59, 1.60, 0.023], 0.5, 0.3)
18 time.sleep(1)
19 startDeg = 0
20 sluttDeg=2*math.pi
21 print(sluttDeg)
22 steps = 90
23 degPrStep = sluttDeg/90
24 print(degPrStep)
25 deg = 0
26 r = 0.1
27 y = r*math.cos(deg)
28 z = r*math.sin(deg)
29 print(y, ' ', z)
30 #print(joint_q, 0.5, 0.3)
31 rtde_c.moveL(joint_q,0.5, 0.3)
32
33 for i in range(steps):
34     #rtde_c.servoJ(joint_q, velocity, acceleration, dt, lookahead_time, gain)
35     y = r*math.cos(deg)
36     z = r*math.sin(deg)
37     print(y, ' ', z)
38     #joint_q[1] -= y
39     #joint_q[2] += z
40     #print(joint_q, 0.5, 0.3)
41     rtde_c.moveL([joint_q[0], joint_q[1]-y, joint_q[2]+z, joint_q[3]+z, joint_q[4], joint_q[5]], 0.5, 0.3)
42     deg = deg+degPrStep
43     print(deg)
44
45
46

```