**It is advice to download scene and run simulation before trying to understand simulation.**

Quadcopter by default follows Quadcopter\_target mean when we simulate it than quadcopter follow the transparent sphere(Quadcopter\_target). During simulation, moving sphere quadcopter move towards the sphere.

**Understand simulation :**

**1.**I have created a path

( follow link to understand how to create path <https://www.youtube.com/watch?v=P6-qrxsaChg>)

**2.** Create a non threaded script(select Quadcopter\_target than add->associate child script-> non threaded script)

**3.** <https://humanrobotartsynth.space/tutorials/v_rep/path_following.html>

Using this link I have copied the code and pasted in non threaded script of Quadcopter\_target

**Understand code (non threaded script of Quadcopter\_target )**

1. local pathHandle = sim.getObjectHandle('Path')

‘Path’- name should be same as the name of the path you created . pathHandle is the variable name given to ‘Path’

2. sim.followPath(thisObjectHandle, pathHandle, changePositionOnly, 0, 0.17,15)

Means:

sim.followPath(number objectHandle,number pathHandle,

number positionAndOrOrientation,number relativeDistanceOnPath,number velocity,number accel)

**Parameters:**

**objectHandle**: handle of the object to be moved

**pathHandle**: handle of the path object

**positionAndOrOrientation**: a value between 1 and 3 (1: only position is modified, 2: only orientation is modified, 3: position and orientation is modified). Can be nil in which case 3 is applied.

**relativeDistanceOnPath**: a value between 0 and 1, where 0 is the beginning of the path, and 1 the end of the path. Make sure you selected the appropriate path length calculation method (refer to the [path position calculation method](file:///C:\Program%20Files\CoppeliaRobotics\CoppeliaSimEdu\helpFiles\en\pathPositionCalculationMethod.htm) section).

**velocity**: movement nominal velocity.

**accel**: the acceleration/deceleration.