# CS 498 Coding assignment 1

Kulbir

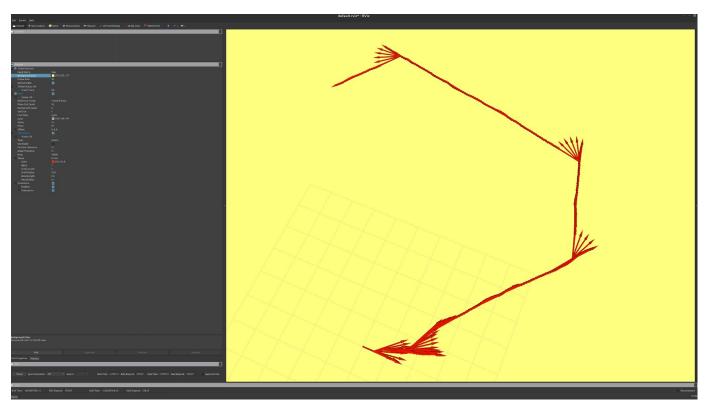
### Qn 2

ROS node can be seen in the attached .py file.

Odometry ROS message with x,y,z,yaw in quaternion representation, linear and angular velocity is published on /odom:

```
rostopic echo /odom
                       rostopic echo /odom 104x35
eader:
seq: 156
stamp:
 secs: 1633131643
 nsecs: 770833969
frame id: "/map"
child frame id: "/base link"
oose:
 position:
  x: -0.337496394109
  v: 2.75055925644
  z: 0.0
 orientation:
  x: 0.0
  v: 0.0
   z: -0.811115680471
  w: 0.58488576055
twist:
twist:
 linear:
  x: 0.731967508793
  y: 0.0
  z: 0.0
 angular:
  x: 0.0
  v: 0.0
  z: 0.0
```

## Qn 2 plot in RViz



### Qn 3

ROS node can be seen in the attached .py file.

Odometry ROS message using GPS with x,y,z,yaw in quaternion representation, linear and angular velocity is published on /odom:

```
rostopic echo /odometer_gps
                     rostopic echo /odometer gps 104x35
eader:
seq: 5143
stamp:
 secs: 1633131586
 nsecs: 670954942
frame id: "/map"
child frame id: "/base link"
 position:
  x: -7.15586909943
  y: -0.223683226854
  z: 0.0
 orientation:
  x: 0.0
  y: 0.0
  z: 0.0
  w: 1.0
twist:
twist:
 linear:
  x: 0.0
  y: 0.0
  z: 0.0
 angular:
  x: 0.0
  y: 0.0
  z: 0.0
```

## Qn 3 plot in RViz

