Target is defined in the segments with duration for steady flight in segment 1 and 2

And total angle change for segment 3 during turn

Segment number (steady flight: 1; Acceleration: 2; Turn: 3; )

Interval is time interval for simulation

Spd is speed in meter per sec

Head is Heading in degrees

While loop is executed for the duration of the target with above interval

While loop till the end of the scenario

switch(segType(prsntSegNo))

case 1

[X1, Y1, Z1] = climb\_altitude(X, Y, Z, Spd, Head, tarVz\*1000, T);

case 2

[X1, Y1, Z1, Spd] = speedwithclimb\_altitude(X, Y, Z, Spd, Head, tarVz\*1000, tarAcc(prsntSegNo), T);

case 3

[X1, Y1, Z1, Spd, Head] = headingwithclimb\_altitude(X, Y, Z, Spd, Head, tarVz\*1000, tarTurnRate(prsntSegNo), T);

end

once the segment is completes the prsntSegNo is increased