**Sample code execution:**

**Comments are in red.**

sourav@F-station:~/DiamondKinetics$ ./DK

Enter the path to sensor data csv file:

latestSwing.csv (Input the filepath)

Choose the helper funtions to call from below options:

0. Exit

1. searchContinuityAboveValue

2. backSearchContinuityWithinRange

3. searchContinuityAboveValueTwoSignals

4. searchMultiContinuityWithinRange

Columns in the sensor data are named as below

Ax-0, Ay-1, Az-2, wx-3, wy-4, wz-5

Pass appropriate column number as col\_num while calling functions

3 (choosing to run searchContinuityAboveValueTwoSignals on the data)

searchContinuityAboveValueTwoSignals :

Enter column1 #,column2 #,indexBegin,indexEnd,threshold1,threshold2,winLength

3 4 800 1000 5 20 1 (running on wx and wy column)

874 876 (prints the start and end index of the first continuous piece satisfying the window conditions)

1

searchContinuityAboveValue :

Enter column #,indexBegin,indexEnd,threshold,winLength

4 800 1000 20 45

832 876 (prints the start and end index of the first continuous piece satisfying the window conditions)

4

searchMultiContinuityWithinRange :

Enter column1 #,indexBegin,indexEnd,thresholdLo,thresholdHi,winLength

4 800 1000 60 80 3

-1 -1 (Negative one index returned when no continuous piece can be found in the range provided)

4

searchMultiContinuityWithinRange :

Enter column1 #,indexBegin,indexEnd,thresholdLo,thresholdHi,winLength

4 800 1000 5 20 5

800 831 (Prints all the continuous pieces within the range satisfying the window condition)

896 900

917 929

944 950

0 (Inpu 0 to exit the code)