README

Steps to Execute Code:

1. Update the paths to datasets “CGMData.csv” and “InsulinData.csv” in main.py (line 10&11 respectively), if they are named different or not in the same directory as main.py,
2. Install “pandas” package (“pip install pandas”) if not already installed,
3. Run the ‘main.py’ python script using CMD “python main.py”

NOTE:

1. The “Date” and “Time” fields in the data sets have been combined to derive a new Index field called “date\_time\_stamp” of type DateTime.
2. After filtering the necessary fields of CGM data onto a new pandas data frame, ‘group-by’ and ‘slicing’ techniques (over the date\_time\_stamp index) are followed for segmentation of the data frame based on MODE (Manual & Auto - slicing), date (Whole days – group by) and Time (day time and overnight - slicing),
3. Percentage of in-range values for all six given cases are calculated for each segment (over the fixed 288 total number of values with missing values replaced by 0’s) and are added to two result data frame – one for manual and one for auto mode.
4. As the last step, to get the overall average percentage of in-range values, the mean of result data frames is calculated and are exported to “Results.csv”.