Session 8

Assignment 1 Question

Session 8: Assignment 1

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1. Introduction

This assignment will help you to consolidate the concepts learnt in the session.

2. Problem Statement

1) How-to-count-distance-to-the-previous-zero

For each value, count the difference of the distance from the previous zero (or the start of the Series, whichever is closer) and if there are no previous zeros,print the position

Consider a DataFrame df where there is an integer column {'X':[7, 2, 0, 3, 4, 2, 5, 0, 3, 4]}

The values should therefore be [1, 2, 0, 1, 2, 3, 4, 0, 1, 2]. Make this a new column 'Y'.

import pandas as pd

df = pd.DataFrame({'X': [7, 2, 0, 3, 4, 2, 5, 0, 3, 4]})

2) Create a DatetimeIndex that contains each business day of 2015 and use it to index a Series of random numbers.

3) Find the sum of the values in s for every Wednesday

4) Average For each calendar month

5) For each group of four consecutive calendar months in s, find the date on which the highest value occurred.

3. Expected Output

Note: Solution submitted via github must contain all the source code and output.