



## 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 back to the previous zero (or the start of the Series, whichever is closer)

create a new column 'Y'

Consider a DataFrame df where there is an integer column 'X'

```
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.**