

## Section II: Python

1. Write a short neat code for the following:
  - a. Create a list of integers from 1 to 100. Using list comprehension, generate a list of squares of the above integers if they are odd.
  - b. Write a function that returns the number of vowels in a given string.
2. Read the 'bank.csv' file as DataFrame with Pandas and answer/solve the following questions.
  - a. What is the most common occupation in the 'job' column?
  - b. What is the mean 'balance' for people with marital status as married and also education as tertiary?
  - c. What is the mean 'age' for different 'education' categories?
  - d. Drop the following columns from the dataframe: *job, day, month, pdays, previous, poutcome*.
  - e. Recode categorical variables with 2 levels as 0 & 1.
  - f. Replace categorical variables with more than 2 levels with their respective dummy variables.
  - g. Standardize the numeric columns.