

## **SERIES EXERCISES**

1. Generate an even number panda series of length 50.
2. Read a file "words.txt" and create a panda series by reading first 50 words from the file.
3. Generate a panda series of length 50 of random values? Hint: you can use NumPy random.
  - a. Get absolute numeric values from the series.
  - b. Calculate cumulative sum of the series.
4. Create an index named week, using date range with 7 periods (an index per day for week). Then create a NumPy array of 7 x 3 of random values between 300 and 1500 meal calorie count. Now, create a pandas dataframe using the generated array, with index week and labels, breakfast, lunch and dinner.
  - a. Get the day with highest calorie count.
  - b. Create a series of cumulative sum over days, to have a count of total intake for the week.
  - c. Find duplicate rows.
5. Create a dictionary of {date: date range of week, day: series of day names, Kcal:calories for lunch, cuisine: series of cuisine names, price: series price}
  - a. Get type of each column.
  - b. Get head and check if week head is Monday.
  - c. Get tail (2) and check if it is Friday and Saturday.
  - d. Make an index using date column.
  - e. Try making an index using cuisine column, if not possible explain why?
6. Generate a series: Month which will have 12 entries, each entry represents the name of the month and index them using the first three letters of the name of the month. (Example: November will have the index "Nov").
  - a. Copy your series into a new series using B=A method.
  - b. Copy your series using C = A.copy().
  - c. State the difference.