

## **Exercise: 2**

1. Create a simple Pandas Series from a list.
2. Return the first and last values of the Series created above
3. Create a simple Pandas Series with your own labels i.e. index
4. Access the values using your own index and print the value, also try –ve index.
5. Create a simple Pandas Series from a dictionary
6. Create a Series using only calories intake data from user defined indexes "day1","day2", and "day3".
7. Create a Series of heterogeneous data types and check the data type of the Series as well as individual items.
8. Compute min, max, mean values of a Series
9. Compute the relative change percentage in values of a Series.
10. Add items in a Series from another Series.
11. Create a Series of 20 items and print first 5 and last 5 elements of this Series. (use *head* and *tail*)
12. Assign new index to existing series.

13. Reset the index of an existing Series and delete the existing index.
14. Sort the values of a Series in ascending and descending order and print
15. Print the number of occurrences of unique values in a series. (use *value\_counts*)
16. Create a Series of 10 integers, and later change its dtype to be float (use *astype*).
17. Convert the Series you created above to numpy array (use *to\_numpy()*, or *array* )
18. Delete an item from Series using single index.
19. Find the number of items in a series. (use *len* or *count*)
20. Append Series by assigning a value to a new index. (*S[n]=v*)
21. Check if a value is present in a Series. (use type cast to a set or check in values)
22. Print the index of a Series and also if all indexes appear only once. (use *is\_unique*)
23. Create two Series one with default index, other with index like 'a','b','c','d', etc. then access both the Series based on label and position (use *iloc* for index position, and *loc* for index labels)
24. Try function *at* and *iat* on above problem and observe the difference in output with respect to *loc* and *iloc*.