Basic pandas task:

1. Create a series using a list (my\_list) and an array (my\_arr). Both can be of length 10
2. Create a series using a dictionary from above my\_list and my\_arr as key and value pairs (Hint: my\_dict = dict(zip(my\_list, my\_arr))
3. Create 3 series of different data types and concatenate them across axis = 1
4. Create a data frame using a list of list and dictionary using a forced index
5. Create a data frame with 2 integer columns and perform at least 3 numerical operation and storing them as adjacent columns. Your final df should contain 5 columns
6. Delete 2 columns using del and drop function
7. Create a data frame with shape 10x5 and extract only those records that are beyond row# 5
8. Add a last row in a data frame and reset their index
9. Slice all the rows but last 3 columns
10. Take first and last 5 observations using pre defined pandas function
11. Using any of the existing data frame, implement dtypes, shape and size functions
12. Calculate the sum of the values across axis=1 for a data frame. Here, string columns will be not considered by default while performing calculations
13. Calculate mean, median, standard deviation and mode for an integer column of an existing data frame
14. Take min and max of a column, also describe the basic statistics of a data frame
15. Rename the columns with just 3 characters across
16. Apply sort to the first column and reset the index
17. Using iloc, take the first 4 observations and last 2 columns
18. Create a data frame with multiple Nan records and fill them with a generic number
19. Count the number of null records in a column
20. Please implement the group by and merge function with multiple conditions and get accustomed to it.