**Time Duration: 2 Hours**

1. Write a Python program which iterates the integers from 1 to 50. For multiples of 3 print "Fizz" instead of the number and for the multiples of 5 print "Buzz". For numbers, which are multiples of both 3 and 5 print "FizzBuzz".
2. Write a Python program to count the number of even and odd numbers from a tuple of numbers.  
   numbers=(12,15,3,6,26,33,56,65,78,37,42,99)
3. Take 5 integers from keyboard using a loop and print their average value on the screen.
4. Following are the tuples of students who have enrolled for two courses. Find out those students who have enrolled for both the courses.

course\_A=('Anuj', 'Katrina', 'John', 'Jessica', 'Michael', 'Rahul', 'Khushboo')

course\_B=('Bhavana', 'Katrina','Michael', 'Robert', 'Khushboo', 'Sachin' )

1. **Write a Python function to create and print a list where the values are square of numbers between 1 and 25 (both included).**
2. **Write a Pandas program to create a Series out of the given list and sort it in the descending order.**   
   data\_list=['1000', 'spyder', 'python', 'jupyter', '400.78', 'anaconda']
3. **Create a series out of a range of values from 1 to 10. Ask the user to specify how many observations should be displayed and print that many observations from the series.**
4. **Write a Pandas program to create the mean and standard deviation of the data of a given Series.**   
   data\_list = [1,2,3,4,5,6,7,8,9,5,3]
5. **Write a Pandas program to display a summary of the basic information about the DataFrame and its data.**   
   exam\_data = {'name': ['Anuj', 'Bhavana', 'Katrina', 'John', 'Jessica', 'Michael', 'Robert', 'Rahul', 'Khushboo', 'Sachin'], 'score': [12.5, 9, 16.5, 8, 9, 20, 14.5, 5, 8, 19], 'attempts': [1, 3, 2, 3, 2, 3, 1, 1, 2, 1], 'qualify': ['yes', 'no', 'yes', 'no', 'no', 'yes', 'yes', 'no', 'no', 'yes']}   
   labels = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j']
6. **Select 'name' and 'score' columns in rows 1, 3, 5, 6 from the above data frame.**
7. **Write a Pandas program to select the rows where the number of attempts in the examination is greater than 2 and still did not qualify.**
8. **Write a Pandas program to change the score in row 'd' to 11.5.**
9. Write a Pandas program to change the name 'Jessica' to 'Suresh' in name column of the DataFrame.
10. Write a Pandas program to delete the 'attempts' column from the DataFrame.
11. Write a Pandas program to rearrange the columns of the dataframe. Follow the order:

Qualify, Name, Score