# Python Questions:

#### Answers: D:\Master\_Folder\Data Science Course\Practice Problems\Problems.ipynb

1. Write a Python program that asks the respondent for their **name, age, and country**. Then, print a summary.
2. Ask a user a multiple-choice question and validate their input.
3. Collect **ratings (1-5)** from multiple respondents and calculate the **average rating**.
4. Collect **Name, Age, and Feedback** from multiple respondents and store them in a **dictionary**. Then, print all responses.
5. Ask the user for a **list of numbers** (comma-separated), convert them into a list of integers, and calculate their **mean, median, and standard deviation**.
6. Ask the user for a dataset column (a list of numbers), then filter out values above a given threshold entered by the user.
7. Ask the user for a list of numbers with some "missing" values as "NA", then replace "NA" with the mean of the available numbers.
8. Ask the user for column names and row values and create a Pandas DataFrame dynamically.
9. Ask the user to upload a CSV file, read it using Pandas, and display basic stats (describe()) along with missing values count.
10. Ask the user for a dataset (CSV file), select target and feature columns, and train a simple Linear Regression model.
11. Write a program that takes an integer as input and determines whether it is odd or even using if-else.
12. Ask the user for two numbers and an operator (+, -, \*, /). Perform the operation using if-elif-else.
13. Continuously take user input (integers). Stop when the user enters -1, then print the sum of all positive numbers entered using a while loop.
14. FizzBuzz (Classic DS Problem)
    1. Print numbers from 1 to 50.
    2. If the number is divisible by 3, print "Fizz".
    3. If it's divisible by 5, print "Buzz".
    4. If it's divisible by both, print "FizzBuzz".
    5. Otherwise, print the number.
15. Ask the user for a number N and find all prime numbers up to N.
16. Ask the user for a string and count the number of vowels (a, e, i, o, u) in it.
17. Ask the user for a list of numbers (comma-separated) and remove any duplicates.
18. Ask the user for a tuple (comma-separated values), reverse it, and display the result.
19. Ask the user for a sentence and count the occurrences of each word using a dictionary.
20. Ask the user for two lists of numbers and find the common elements using sets.
21. Ask the user for a list of words and group all anagrams together using a dictionary.
22. Function to Clean Data
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    * Create a function clean\_text that takes a string and:
    * Strips leading/trailing spaces,
    * Converts to lowercase,
    * Removes special characters (only keep alphanumerics and spaces).
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