

You'll be working with various Python collections and exploring the concepts of map and filter functions.

### **Tasks:**

#### **List Operations:**

- Create a list of integers containing numbers from 1 to 10.
- Append the square of each number to the list.
- Find and print the sum of all elements in the list.

#### **Tuple Operations:**

- Create a tuple containing the first five even numbers.
- Find and print the product of all elements in the tuple.

#### **Set Operations:**

- Create two sets of odd numbers between 1 to 10.
- Find and print the union of the two sets.
- Find and print the intersection of the two sets.

#### **Dictionary Operations:**

- Create a dictionary where keys are the first five lowercase alphabets and values are their respective ASCII values.
- Print the dictionary.

#### **Functional Programming:**

- Define a function `square(x)` that returns the square of `x`.
- Use the `map` function to apply the square function to each element in a list of integers from 1 to 10 and print the result.

#### **Submission:**

- Submit a jupyter notebook containing your code along with the outputs for the tasks mentioned above. Need to upload it to your github folder.
- Make sure to include comments to explain your code logic.
- Ensure your code is properly formatted and readable.

#### **Note:**

- You can test your code with different inputs to validate its correctness.
- Aim for efficiency and readability in your code implementation.