Exercise 5

- 1. Write a function square_list(numbers) that takes a list of numbers and returns a new list with the squares of those numbers using a list comprehension.
- 2. Write a function get_employee_name(employee_dict, employee_id) that takes a dictionary of employees (where keys are IDs and values are names) and an employee ID, and returns the name of the employee with that ID.
- 3. Write a function filter_high_scores(scores) that takes a dictionary of student scores and returns a new dictionary with only the students who scored more than 80.
- 4. Write a function common_elements(set1, set2) that takes two sets and returns their intersection.
- 5. Write a function lcm(a, b) that takes two integers and returns their least common multiple
- 6. Write a function is_prime(n) that takes an integer and returns True if it's a prime number and False otherwise.
- 7. Write a function sieve_of_eratosthenes(limit) that returns a list of all prime numbers up to a given limit using the Sieve of Eratosthenes algorithm.
- 8. Write a function to my_sum similar to sum function in python. It should be able to take arbitary number of elements as input.
- 9. Write a function to get weather report for kathmandu from api at : openweathermap [use this for the class] [https://db5f-103-5-150-130.ngrok-free.app/weather]