

# Dictionary Assignment

## Dictionary Questions for a Whole Day

### Basic (Concept & Syntax)

1. Create a dictionary with keys `"name"`, `"age"`, and `"city"` and print it.
2. Access the value of `"age"` from `{"name": "John", "age": 25, "city": "London"}`.
3. Add a new key-value pair `"country": "UK"` to an existing dictionary.
4. Change the value of `"city"` to `"Paris"` in a given dictionary.
5. Delete the `"age"` key from a dictionary.

### Medium

1. Check if the key `"salary"` exists in `{"name": "Sam", "salary": 5000}`.
2. Merge two dictionaries `{1: "a", 2: "b"}` and `{3: "c", 4: "d"}` into one.
3. Get all keys and all values separately from a dictionary.
4. Create a dictionary from two lists:  
`keys = ["a", "b", "c"]` and `values = [1, 2, 3]`.
5. Count how many times each letter appears in `"banana"` using a dictionary.

### Challenging

1. Write a program to get the key with the maximum value in a dictionary.
2. Invert a dictionary so that its values become keys and keys become values.
3. Given a nested dictionary of student details, print the names of students who scored more than 80 in math.
4. Write a program to sort a dictionary by its values in ascending order.
5. Remove all keys from a dictionary that have `None` as a value.