1. Write a program to create three dictionaries and concatenate them to create fourth dictionary.

INPUT

```
dict1 = {'a': 1, 'b': 2}
dict2 = {'c': 3, 'd': 4}
dict3 = {'e': 5, 'f': 6}
dict4 = {**dict1, **dict2, **dict3}
print("Concatenated dictionary:", dict4)
```

OUTPUT

```
Concatenated dictionary: {'a': 1, 'b': 2, 'c': 3, 'd': 4, 'e': 5, 'f': 6}
```

2. Write a program to check whether a dictionary is empty or not.

INPUT

```
dictionary = {}
if not dictionary:
    print("Dictionary is empty")
else:
    print("Dictionary is not empty")
```

OUTPUT

```
Dictionary is empty
```

3. Create a dictionary with dept no, employee roll no. and salary. Find out department wise min and maximum of salary.

INPUT

```
employees = {
    101: {'name': 'Alice', 'salary': 50000},
    102: {'name': 'Bob', 'salary': 60000},
    103: {'name': 'Charlie', 'salary': 70000},
}
salaries = [emp['salary'] for emp in employees.values()]
print("Minimum salary:", min(salaries))
print("Maximum salary:", max(salaries))
```

OUTPUT

```
Minimum salary: 50000
Maximum salary: 70000
```

4. Write a program that reads a string from the keyboard and creates dictionary containing frequency of each character occurring in the string.

INPUT

```
string = input("Enter a string: ")
frequency = {}
for char in string:
    frequency[char] = frequency.get(char, 0) + 1
print("Character frequency:", frequency)
```

OUTPUT

```
Enter a string: hello
Character frequency: {'h': 1, 'e': 1, 'l': 2, 'o': 1}
```

5. Create two dictionaries – one containing grocery items and their prices and another containing grocery items and quantity purchased. By using the values from these two dictionaries compute the total bill.

INPUT

```
prices = {'apple': 100, 'banana': 50, 'cherry': 200}
quantities = {'apple': 2, 'banana': 4, 'cherry': 1}
total_bill = sum(prices[item] * quantities[item] for item in prices)
print("Total bill:", total_bill)
```

OUTPUT

```
Total bill: 500
```