

1. Given a list of integers, write a program to compute the frequency of each integer and store the results in a dictionary.

2. Given a list of sentences, count the occurrences of each word across all sentences. Store the counts in a dictionary and print the dictionary.

3. Given a paragraph (a string), split it into words, count the frequency of each word, and store the counts in a dictionary. Print the dictionary showing each word and its frequency.

In []:

1

In []:

1

In [5]:

```
1 #q1
2 numbers = [1, 2, 2, 3, 3, 3, 4, 4, 4,5]
3
4 frequency_dict = {}
5
6 for number in numbers:
7     if number in frequency_dict:
8         frequency_dict[number] += 1
9     else:
10        frequency_dict[number] = 1
11
12 print(frequency_dict)
```

```
{1: 1, 2: 2, 3: 3, 4: 3, 5: 1}
```

In [6]:

```
1 #q2
2 sentences = ["hello world", "world of python", "hello python"]
3 frequency_dict = {}
4 for sentence in sentences:
5     words = sentence.split()
6     for word in words:
7         if word in frequency_dict:
8             frequency_dict[word] += 1
9         else:
10            frequency_dict[word] = 1
11 print(frequency_dict)
```

```
{'hello': 2, 'world': 2, 'of': 1, 'python': 2}
```

In [12]:

```
1 #q3
2 paragraph = "This is a test. This test is only a test."
3 words1 = paragraph.lower()
4 words2=words1.replace('.', '')
5 words=words2.split()
6 frequency_dict = {}
7 for word in words:
8     if word in frequency_dict:
9         frequency_dict[word] += 1
10    else:
11        frequency_dict[word] = 1
12 print(frequency_dict)
```

```
{'this': 2, 'is': 2, 'a': 2, 'test': 3, 'only': 1}
```

In [19]:

```
1 #q3
2 paragraph = "Can you believe that this will really work? I mean, really, it's hard"
3
4 words1 = paragraph.lower()
5
6 punctuation = ['.', '?', '!', ',', ';', ':']
7 for symbol in punctuation:
8     words1 = words1.replace(symbol, '')
9
10 words = words1.split()
11
12 frequency_dict = {}
13 for word in words:
14     frequency_dict[word] = frequency_dict.get(word, 0) + 1
15
16 print(frequency_dict)
```

```
{'can': 1, 'you': 1, 'believe': 1, 'that': 1, 'this': 1, 'will': 1, 'really': 2, 'work': 1, 'i': 1, 'mean': 1, 'it's': 1, 'hard': 1, 'to': 1, 'imagine': 1}
```

In []:

1