Exercise 1: Convert two lists into a dictionary

Below are the two lists. Write a Python program to convert them into a dictionary in a way that item from list1 is the key and item from list2 is the value

```
keys = ['Ten', 'Twenty', 'Thirty']
values = [10, 20, 30]
```

Expected output:

```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30}
```

Exercise 2: Merge two Python dictionaries into one

```
dict1 = {'Ten': 10, 'Twenty': 20, 'Thirty': 30}
dict2 = {'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
```

Expected output:

```
{'Ten': 10, 'Twenty': 20, 'Thirty': 30, 'Fourty': 40, 'Fifty': 50}
```

Exercise 3: Print the value of key ‘history’ from the below `dict`

```
sampleDict = {
    "class": {
        "student": {
            "name": "Mike",
            "marks": {
                "physics": 70,
                "history": 80
            }
        }
    }
}
```

Expected output:

80

Exercise 4: Delete a list of keys from a dictionary

Given:

```
sample_dict = {
    "name": "Kelly",
    "age": 25,
    "salary": 8000,
    "city": "New york"
}

# Keys to remove
keys = ["name", "salary"]
```

Expected output:

```
{'city': 'New york', 'age': 25}
```

Exercise 5: Check if a value exists in a dictionary

We know how to check if the key exists in a dictionary. Sometimes it is required to check if the given value is present.

Write a Python program to check if value 200 exists in the following dictionary.

Given:

```
sample_dict = {'a': 100, 'b': 200, 'c': 300}
```

Expected output:

```
200 present in a dict
```

EXERCISE 6 - List-to-Series Conversion

Given a list, output the corresponding pandas series

Sample Solution

```
given_list = [2, 4, 5, 6, 9]
```

Corresponding Output

```
0    2
1    4
2    5
3    6
4    9
dtype: int64
```

EXERCISE 7 - Dictionary-to-Dataframe Conversion

Given a dictionary, convert it into corresponding dataframe and display it

Given :

```
dictionary = {'name': ['Vinay', 'Kushal', 'Aman'],
              'age' : [22, 25, 24],
              'occ' : ['engineer', 'doctor', 'accountant']}
```

Corresponding Output

```
     name  age         occ
0   Vinay   22    engineer
1  Kushal   25      doctor
2    Aman   24  accountant
```

Exercise 8: From the given dataset print the first and last five rows

Expected Output:

	index	company	body-style	wheel-base	length	engine-type	num-of-cylinders	horsepower	average-mileage	price
0	0	alfa-romero	convertible	88.6	168.8	dohc	four	111	21	13495.0
1	1	alfa-romero	convertible	88.6	168.8	dohc	four	111	21	16500.0
2	2	alfa-romero	hatchback	94.5	171.2	ohcv	six	154	19	16500.0
3	3	audi	sedan	99.8	176.6	ohc	four	102	24	13950.0
4	4	audi	sedan	99.4	176.6	ohc	five	115	18	17450.0

Python Pandas printing first 5 rows

	index	company	body-style	wheel-base	length	engine-type	num-of-cylinders	horsepower	average-mileage	price
56	81	volkswagen	sedan	97.3	171.7	ohc	four	85	27	7975.0
57	82	volkswagen	sedan	97.3	171.7	ohc	four	52	37	7995.0
58	86	volkswagen	sedan	97.3	171.7	ohc	four	100	26	9995.0
59	87	volvo	sedan	104.3	188.8	ohc	four	114	23	12940.0
60	88	volvo	wagon	104.3	188.8	ohc	four	114	23	13415.0