

List of dictionary methods:

- `clear()`
- `copy()`
- `fromkeys(iterable, value=None)`
- `get(key, default=None)`
- `items()`
- `keys()`
- `pop(key, default=None)`
- `popitem()`
- `setdefault(key, default=None)`
- `update(other_dict)`
- `values()`

Explanation with code

- `clear()`: This method removes all items from the dictionary.

Create a dictionary

```
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}
```

Clear the dictionary

```
my_dict.clear()
```

Output: {}

```
print(my_dict)
```

- `copy()`: This method returns a shallow copy of the dictionary. The new dictionary will contain the same keys and values as the original dictionary.

Create a dictionary

```
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}
```

Make a copy of the dictionary

```
new_dict = my_dict.copy()
```

```
new_dict["apple"] = 3 # without changing the original dict
```

Output: {'apple': 3, 'banana': 3, 'orange': 1}

```
print(new_dict)
```

- `get(key, default=None)`: This method returns the value for a given key. If the key is not found in the dictionary, it returns the default value (which defaults to None).

```

# Create a dictionary
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}

# Get the value for the key 'apple'
# Output: 2
print(my_dict.get('apple'))

# Get the value for the key 'pear'
# Output: None
print(my_dict.get('pear'))

# Get the value for the key 'pear', with a default value of 0
# Output: 0
print(my_dict.get('pear', 0))

```

- items(): This method returns a list of key-value pairs in the dictionary as tuples.

```

# Create a dictionary
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}

# Get the key-value pairs as a list of tuples
# Output: [('apple', 2), ('banana', 3), ('orange', 1)]
print(my_dict.items())

```

- keys(): This method returns a list of all the keys in the dictionary.

```

# Create a dictionary
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}

# Get the keys as a list
# Output: ['apple', 'banana', 'orange']
print(my_dict.keys())

```

- pop(key, default=None): This method removes the key-value pair for a given key and returns the value. If the key is not found in the dictionary, it returns the default value (which defaults to None).

```

# Create a dictionary
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}

# Remove the key-value pair for the key 'banana' and return the value
# Output: 3
print(my_dict.pop('banana'))

```

```
# Remove the key-value pair for the key 'pear' and return the default value  
# Output: 0  
print(my_dict.pop('pear', 0))
```

- popitem(): This method removes and returns an arbitrary key-value pair from the dictionary. If the dictionary is empty, it raises a KeyError.

```
# Create a dictionary  
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}  
  
# Remove and return an arbitrary key-value pair from the dictionary  
# Output: ('orange', 1)  
print(my_dict.popitem())
```

- setdefault(key, default=None): This method returns the value for a given key. If the key is not found in the dictionary, it adds the key with the default value (which defaults to None) and returns the default value.

```
# Create a dictionary  
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}  
  
# Get the value for the key 'apple'  
# Output: 2  
print(my_dict.setdefault('apple'))  
  
# Get the value for the key 'pear', which doesn't exist in the dictionary, c  
# Output: 0  
print(my_dict.setdefault('pear', 0))  
  
# The dictionary now contains the key-value pair for 'pear'  
# Output: {'apple': 2, 'banana': 3, 'orange': 1, 'pear': 0}  
print(my_dict)
```

- update(other_dict): This method updates the dictionary with the key-value pairs from another dictionary. If a key exists in both dictionaries, the value in the original dictionary is replaced with the value from the other dictionary.

```
# Create two dictionaries  
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}
```

```
other_dict = {'pear': 4, 'kiwi': 2}
```

```
# Update my_dict with the key-value pairs from other_dict
```

```
my_dict.update(other_dict)
```

```
# The updated dictionary contains all the key-value pairs
```

```
# Output: {'apple': 2, 'banana': 3, 'orange': 1, 'pear': 4, 'kiwi': 2}
```

```
print(my_dict)
```

- `values()`: This method returns a list of all the values in the dictionary.

```
# Create a dictionary
```

```
my_dict = {'apple': 2, 'banana': 3, 'orange': 1}
```

```
# Get the values as a list
```

```
# Output: [2, 3, 1]
```

```
print(my_dict.values())
```