Java.util.Dictionary Class in Java

Difficulty Level : Medium Last Updated : 07 Dec, 2021

util.Dictionary is an abstract class, representing a **key-value** relation and works similar to a map. Given a key you can store values and when needed can retrieve the value back using its key. Thus, it is a list of key-value pair.

Declaration

```
public abstract class Dictionary extends Object
```

Constructors:
Dictionary() Sole constructor.

Methods of util.Dictionary Class :

1. put(K key, V value) : java.util.Dictionary.put(K key, V value) adds key-value pair to the dictionary.

Syntax :

```
public abstract V put(K key, V value)
Parameters :
-> key
-> value
Return :
key-value pair mapped in the dictionary
```

2. elements() : java.util.Dictionary.elements() returns value representation in dictionary.

Syntax :

```
public abstract Enumeration elements()
Parameters :
--------
Return :
value enumeration in dictionary
```

3. get(Object key) : java.util.Dictionary.get(Object key) returns the value that is mapped with the argumented key in the dictionary.

Syntax :

```
public abstract V get(Object key)
Parameters :
key - key whose mapped value we want
Return :
value mapped with the argumented key
```

4. isEmpty() : java.util.Dictionary.isEmpty() checks whether the dictionary is empty or not.

Syntax :

```
public abstract boolean isEmpty()
Parameters :
------
Return :
true, if there is no key-value relation in the dictionary; else false
```

5. keys() : java.util.Dictionary.keys() returns key representation in dictionary.

Syntax :

```
public abstract Enumeration keys()
Parameters :
--------
Return :
key enumeration in dictionary
```

6. remove(Object key) : java.util.Dictionary.remove(Object key) removes the key-value pair mapped with the argumented key.

Syntax :

```
public abstract V remove(Object key)
Parameters :
key : key to be removed
Return :
value mapped with the key
```

7. size() : java.util.Dictionary.size() returns the no. of key-value pairs in the Dictionary.

Syntax :

```
public abstract int size()
```

Parameters :

Return :

returns the no. of key-value pairs in the Dictionary

```
// Java Program explaining util.Dictionary class Methods
// put(), elements(), get(), isEmpty(), keys()
// remove(), size()

import java.util.*;
public class New_Class
{
    public static void main(String[] args)
    {

        // Initializing a Dictionary
        Dictionary geek = new Hashtable();

        // put() method
        geek.put("123", "Code");
        geek.put("456", "Program");

        // elements() method :
        for (Enumeration i = geek.elements(); i.hasMoreElements();)
        {
            System.out.println("Value in Dictionary : " + i.nextElement());
        }

        // get() method :
        System.out.println("\nValue at key = 6 : " + geek.get("6"));
        System.out.println("Value at key = 456 : " + geek.get("123"));

        // isEmpty() method :
        System.out.println("\nThere is no key-value pair : " + geek.isEmpty() +

        // keys() method :
        for (Enumeration k = geek.keys(); k.hasMoreElements();)
        {
            System.out.println("Keys in Dictionary : " + k.nextElement());
        }

        // remove() method :
        System.out.println("\nRemove : " + geek.remove("123"));
        System.out.println("Check the value of removed key : " + geek.get("123"
```

```
        System.out.println("\nSize of Dictionary : " + geek.size());

    }
}
```

Output:

```
Value in Dictionary : Code
Value in Dictionary : Program

Value at key = 6 : null
Value at key = 456 : Code

There is no key-value pair : false

Keys in Dictionary : 123
Keys in Dictionary : 456

Remove : Code
Check the value of removed key : null

Size of Dictionary : 1
```

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