

# Class `java.util.Dictionary`

```
java.lang.Object
|
+----java.util.Dictionary
```

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public class **Dictionary**  
extends [Object](#)

The Dictionary class is the abstract parent of Hashtable, which maps keys to values. Any object can be used as a key and/or value.

**See Also:**  
[Hashtable](#), [hashCode](#), [equals](#)

**Version:**  
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## Constructor Index

o [Dictionary\(\)](#)

## Method Index

- o [elements\(\)](#)  
Returns an enumeration of the elements.
- o [get\(Object\)](#)  
Gets the object associated with the specified key in the Dictionary.
- o [isEmpty\(\)](#)  
Returns true if the Dictionary contains no elements.
- o [keys\(\)](#)  
Returns an enumeration of the Dictionary's keys.
- o [put\(Object, Object\)](#)  
Puts the specified element into the Dictionary, using the specified key.
- o [remove\(Object\)](#)  
Removes the element corresponding to the key.
- o [size\(\)](#)  
Returns the number of elements contained within the Dictionary.

# Constructors

## o Dictionary

```
public Dictionary()
```

# Methods

## o size

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

Returns the number of elements contained within the Dictionary.

## o isEmpty

```
public abstract boolean isEmpty()
```

Returns true if the Dictionary contains no elements.

## o keys

```
public abstract Enumeration keys()
```

Returns an enumeration of the Dictionary's keys.

**See Also:**

elements, Enumeration

## o elements

```
public abstract Enumeration elements()
```

Returns an enumeration of the elements. Use the Enumeration methods on the returned object to fetch the elements sequentially.

**See Also:**

keys, Enumeration

## o get

```
public abstract Object get(Object key)
```

Gets the object associated with the specified key in the Dictionary.

**Parameters:**

key – the key in the hash table

**Returns:**

the element for the key or null if the key is not defined in the hash table.

**See Also:**

put

## o put

```
public abstract Object put(Object key,  
                           Object value)
```

Puts the specified element into the Dictionary, using the specified key. The element may be retrieved by doing a get() with the same key. The key and the element cannot be null.

**Parameters:**

key – the specified hashtable key  
value – the specified element

**Returns:**

the old value of the key, or null if it did not have one.

**Throws:** NullPointerException

If the value of the specified element is null.

**See Also:**

get

## o remove

```
public abstract Object remove(Object key)
```

Removes the element corresponding to the key. Does nothing if the key is not present.

**Parameters:**

key – the key that needs to be removed

**Returns:**

the value of key, or null if the key was not found.