Swift Dictionary

Swift dictionary is an unordered collection of items. It stores elements in **key/value** pairs. Here, **keys** are unique identifiers that are associated with each **value**.

Let's see an example.

If we want to store information about countries and their capitals, we can create a dictionary with country names as **keys** and capitals as **values**.

Keys	Values
Nepal	Kathmandu
Italy	Rome
England	London

Create a dictionary in Swift

Here's how we can create a dictionary in Swift.

```
var capitalCity = ["Nepal": "Kathmandu", "Italy": "Rome", "England": "London"]
```

Create an Empty Dictionary

```
var emptyDictionary =  [Int: String]()
```

Add Elements to a Dictionary

We can add elements to a dictionary using the name of the dictionary with `[]`. For example,

```
var capitalCity = ["Nepal": "Kathmandu", "England": "London"]

// ADD JAPAN to Dictionry

capitalCity["Japan"] = "Tokyo"
```

Change Value of Dictionary

We can also use `[]` to change the value associated with a particular key. For example,

```
var studentID = [111: "Eric", 112: "Kyle", 113: "Butters"]

studentID[112] = "Stan"
```

1. Access Keys Only

We use the `keys` property to access all the keys from the dictionary. For Example,

```
var cities = ["Nepal":"Kathmandu", "China":"Beijing", "Japan":"Tokyo"]

// cities.keys return all keys of cities

var countryName  = Array(cities.keys)

print("Keys: ", countryName)
```

2. Access Values Only

Similarly, we use the `values` property to access all the values from the dictionary. For Example,

```
var cities = ["Nepal":"Kathmandu", "China":"Beijing", "Japan":"Tokyo"]


// cities.values return all values of cities

var countryName  = Array(cities.values)


print("Values: ", countryName)
```

Remove an Element from a Dictionary

We use the `removeValue()` method to remove an element from the dictionary.

For example,

```
var studentID = [111: "Eric", 112: "Kyle", 113: "Butters"]

var removedValue  = studentID.removeValue(forKey: 112)

print("Dictionary After removeValue(): ", studentID)
```

```
OUTPUT:
Initial Dictionary:  [113: "Butters", 111: "Eric", 112: "Kyle"]
Dictionary After removeValue():  [111: "Eric", 113: "Butters"]
```

Iterate Over a Dictionary

```
var classification = ["Fruit": "Apple", "Vegetable": "Broccoli", "Beverage": "Milk"]

for (key,value) in classification {

  print("\(key): \(value)")

}
```

UPDATE VALUE

```
specialServices.updateValue("wheelchair", forKey: "User1")
```