**python zip object**

**Example 1**:-

**list\_1 = ['User','Age','Salary']**

**list\_2 = ['Danish',17,18000]**

**data\_return = zip(list\_1,list\_2)**

**print(data\_return)**

**Output :**

**<zip object at 0x7fb9f585c688>**

**python zip two lists**

**list\_1 = ['User','Age','Salary']**

**list\_2 = ['Danish',17,18000]**

**data\_return = list(zip(list\_1,list\_2))**

**print(data\_return)**

**Output :**

**[('User', 'Danish'), ('Age', 17), ('Salary', 18000)]**

**In tuple**

**list\_1 = ['User','Age','Salary']**

**list\_2 = ['Danish',17,18000]**

**data\_return = tuple(zip(list\_1,list\_2))**

**print(data\_return)**

**Output :**

**(('User', 'Danish'), ('Age', 17), ('Salary', 18000))**

# **zip() in Python**

**The purpose of zip() is to map the similar index of multiple containers so that they can be used just using as single entity.**

***Syntax :  
zip(\*iterators)***

***Parameters :  
Python iterables or containers ( list, string etc )  
Return Value :  
Returns a single iterator object, having mapped values from all the  
containers.***

***# Python code to demonstrate the working of***

***# zip()***

***# initializing lists***

***name = [ "Manjeet", "Nikhil", "Shambhavi", "Astha" ]***

***roll\_no = [ 4, 1, 3, 2 ]***

***marks = [ 40, 50, 60, 70 ]***

***# using zip() to map values***

***mapped = zip(name, roll\_no, marks)***

***# converting values to print as set***

***mapped = set(mapped)***

***# printing resultant values***

***print ("The zipped result is : ",end="")***

***print (mapped)***

Output:

The zipped result is : {('Shambhavi', 3, 60), ('Astha', 2, 70),

('Manjeet', 4, 40), ('Nikhil', 1, 50)}

**How to unzip?**

**Unzipping means converting the zipped values back to the individual self as they were. This is done with the help of “\*” operator.**

***# Python code to demonstrate the working of***

***# unzip***

***# initializing lists***

***name = [ "Manjeet", "Nikhil", "Shambhavi", "Astha" ]***

***roll\_no = [ 4, 1, 3, 2 ]***

***marks = [ 40, 50, 60, 70 ]***

***# using zip() to map values***

***mapped = zip(name, roll\_no, marks)***

***# converting values to print as list***

***mapped = list(mapped)***

***# printing resultant values***

***print ("The zipped result is : ",end="")***

***print (mapped)***

***print("\n")***

***# unzipping values***

***namz, roll\_noz, marksz = zip(\*mapped)***

***print ("The unzipped result: \n",end="")***

***# printing initial lists***

***print ("The name list is : ",end="")***

***print (namz)***

***print ("The roll\_no list is : ",end="")***

***print (roll\_noz)***

***print ("The marks list is : ",end="")***

***print (marksz)***

Output:

**The zipped result is : [('Manjeet', 4, 40), ('Nikhil', 1, 50),**

**('Shambhavi', 3, 60), ('Astha', 2, 70)]**

**The unzipped result:**

**The name list is : ('Manjeet', 'Nikhil', 'Shambhavi', 'Astha')**

**The roll\_no list is : (4, 1, 3, 2)**

**The marks list is : (40, 50, 60, 70)**

**Practical Applications :** There are many possible applications that can be said to be exected using zip, be it **student database or scorecard** or any other utility that requires mapping of groups. A small example of scorecard is demonstrated below.

***# Python code to demonstrate the application of***

***# zip()***

***# initializing list of players.***

***players = [ "Sachin", "Sehwag", "Gambhir", "Dravid", "Raina" ]***

***# initializing their scores***

***scores = [100, 15, 17, 28, 43 ]***

***# printing players and scores.***

***for pl, sc in zip(players, scores):***

***print ("Player : %s Score : %d" %(pl, sc))***

Output:

Player : Sachin Score : 100

Player : Sehwag Score : 15

Player : Gambhir Score : 17

Player : Dravid Score : 28

Player : Raina Score : 43