

# Python zip() Function

## Definition

The zip() function returns a zip object, which is an iterator of tuples where the first item in each passed iterator is paired together, and then the second item in each passed iterator are paired together etc.

If the passed iterators have different lengths, the iterator with the least items decides the length of the new iterator.

## Syntax

zip(iterator1, iterator2, iterator3 ...)

## Parameter Informations

Parameter	Description
iterator1, iterator2, iterator3 ...	Iterator objects that will be joined together (example: list, tuple, string, range, dict)

## Example

```
data1 = range(1,6)
data2 = ['a','b','c','d']
data3 = (1,3,5,7,9,11)
data4 = 'mnopqrs'

hasilZip1 = zip(data1, data2)
print(hasilZip1)
# <zip object at 0x0000019410C81600>

listHasilZip1 = list(hasilZip1)
print(listHasilZip1)
# [(1, 'a'), (2, 'b'), (3, 'c'), (4, 'd')]

hasilZip2 = zip(data2,data3,data4)
print(hasilZip2)
# <zip object at 0x0000019410C816C0>

tupleHasilZip2 = tuple(hasilZip2)
print(tupleHasilZip2)
# (('a', 1, 'm'), ('b', 3, 'n'), ('c', 5, 'o'), ('d', 7, 'p'))

hasilZip3 = zip(data4,data1)
print(hasilZip3)
# <zip object at 0x0000019410C81740>

dictHasilZip3 = dict(hasilZip3)
print(dictHasilZip3)
# {'m': 1, 'n': 2, 'o': 3, 'p': 4, 'q': 5}
```

## Example : Using zip() Function in for Loop

```
# example 1
dataNama = ['Andi', 'Budi', 'Ceci', 'Dedi']
dataUmur = [24, 27, 35, 55]

for nama, umur in zip(dataNama, dataUmur) :
    print('Nama : {} \n Umur : {}'.format(nama, umur))

# example 2
for i, j in zip(range(5), range(10, 0, -2)) :
    print('i = {} & j = {}'.format(i, j))
```