



A for loop is used to iterate over a sequence (such as a list, tuple, string, or range) or any iterable object in Python. The basic syntax of a for loop in Python is as follows:

python

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```
for item in iterable:
    # Code block to be executed for each item in the iterable
```

Here's how it works:

- The `for` keyword is used to start a for loop.
- `item` is a variable that represents each element in the iterable as the loop iterates through it. You can name this variable whatever you want.
- `iterable` is the sequence or collection over which the loop iterates. It can be a list, tuple, string, range, or any other iterable object.
- The colon `:` at the end of the for statement indicates the beginning of the indented block of code that will be executed for each iteration of the loop.
- Inside the indented block, you write the code that you want to execute for each item in the iterable.

Here's a simple example that demonstrates the usage of a for loop to iterate over a list:

python

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```
# Iterating over a list
fruits = ["apple", "banana", "cherry"]
for fruit in fruits:
    print(fruit)
```

Output:

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```
apple
banana
cherry
```




In this example:

- `fruits` is a list containing three elements.
- The for loop iterates over each element in the list.
- For each iteration, the variable `fruit` takes on the value of the current element, and the `print()` function prints it.


You can also use the `range()` function to generate a sequence of numbers and iterate over it using a for loop. For example:

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```
# Iterating over a range of numbers
for i in range(5):
    print(i)
```

Output:

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```
0
1
2
3
4
```

In this example:

- `range(5)` generates a sequence of numbers from 0 to 4 (inclusive).
- The for loop iterates over each number in the sequence, and `i` takes on the value of the current number in each iteration.



### **Code:**

```
list1 =  
[["mohan",1],["john",2],["tom",3],["ankur",  
4]]  
dict1 = dict(list1)  
for item in dict1:  
    print(item)  
  
for item,value in dict1.items():  
    print(item,"having value as ", value)  
  
items = [int,float,  
"mohan",5,3,3,22,21,64,6]  
  
for item in items:  
    if str(item).isnumeric() and item >= 6:  
        print(item)
```

### **Output:**

```
C:\Users\test\PycharmProjects\project_1\.venv\Scripts\python.exe C:\Users\test\PycharmProjects\project_1\Project_1.py  
mohan  
john  
tom  
ankur  
mohan having value as 1  
john having value as 2  
tom having value as 3  
ankur having value as 4  
22  
21  
64  
6
```