

Here is a simple **for loop** example in Python:

Basic for Loop Example

python

Copy code

```
# Looping through a list of numbers
```

```
numbers = [1, 2, 3, 4, 5]
```

```
for number in numbers:
```

```
    print(f"Number: {number}")
```

Output:

javascript

Copy code

Number: 1

Number: 2

Number: 3

Number: 4

Number: 5

for Loop with range() Function:

The range() function generates a sequence of numbers. Here's an example:

python

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```
# Looping through a range of numbers
```

```
for i in range(1, 6): # Range from 1 to 5 (6 is excluded)
```

```
    print(f"Value: {i}")
```

Output:

makefile

Copy code

Value: 1

Value: 2

Value: 3

Value: 4

Value: 5

for Loop Iterating Over a String:

A for loop can also iterate through the characters of a string.

python

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```
text = "Hello"
```

```
for char in text:
```

```
    print(f"Character: {char}")
```

Output:

makefile

Copy code

Character: H

Character: e

Character: l

Character: l

Character: o

for Loop with enumerate():

If you want the index along with the value in a loop:

python

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```
names = ["Alice", "Bob", "Charlie"]
```

```
for index, name in enumerate(names):
```

```
    print(f"Index: {index}, Name: {name}")
```

Output:

yaml

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Index: 0, Name: Alice

Index: 1, Name: Bob

Index: 2, Name: Charlie

Key Points:

1. A for loop iterates over a sequence (e.g., list, string, or range).
2. The range() function is commonly used for numerical loops.
3. Use enumerate() if you need both the index and value during iteration.

Let me know if you'd like more examples or explanations! 😊