

Python – if in Range, if not in Range

Python IF Number in Range

You can check if a number is present or not present in a Python range() object.

To check if given number is in a range, use [Python if](#) statement with **in** keyword as shown below.

```
if number in range(start, stop[, step]):  
    statement(s)
```

number in range() expression returns a boolean value: **True** if number is present in the range(), **False** if number is not present in the range.

You can also check the other way around using not to the existing syntax.

```
if number not in range(start, stop[, step]):  
    statement(s)
```

Now the expression: **number not in range()** returns **True** if the number is not present in the range, and **False** if number is present in the range.

Example 1 – If Number in range()

In this example, we will create a range object that represents some sequence of numbers, and check if a given number is present in the range or not.

Python Program

```
range_1 = range(2, 20, 3)  
number = int(input('Enter a number : '))  
  
if number in range_1 :  
    print(number, 'is present in the range.')  
else :  
    print(number, 'is not present in the range.')
```

Output

```
D:\workspace\python> python example.py
Enter a number : 4
4 is not present in the range.
D:\workspace\python> python example.py
Enter a number : 5
5 is present in the range.
D:\workspace\python> python example.py
Enter a number : 11
11 is present in the range.
D:\workspace\python> python example.py
Enter a number : 12
12 is not present in the range.
```

Example 2 – If Number not in range()

You can also check if the number is not in range.

In this example, we will create a range object that represents some sequence of numbers, and check if a given number is not present in the range.

Python Program

```
range_1 = range(2, 20, 3)
number = int(input('Enter a number : '))

if number not in range_1 :
    print(number, 'is not present in the range.')
else :
    print(number, 'is present in the range.')
```

Output

```
D:\workspace\python> python example.py
Enter a number : 4
4 is not present in the range.
D:\workspace\python> python example.py
Enter a number : 5
5 is present in the range.
D:\workspace\python> python example.py
Enter a number : 11
11 is present in the range.
D:\workspace\python> python example.py
Enter a number : 12
12 is not present in the range.
```

Conclusion

Concluding this [Python Tutorial](#), we learned how to check if a given number is present in the range() or not using **if in range** and **if not in range** expressions.

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