

In Python 3, there is no xrange, but the range function behaves like xrange in Python 2.

range and xrange are built-in functions in Python that are used to generate a list of integers within a given range.

<p>Python 2: It returns a list of integers.</p> <pre>>>> range(10) [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]</pre>	<p>Python 3:</p> <pre>>>> range(10) range(0, 10) >>> list(range(10)) [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]</pre>
<p>Python 2: It returns a generator object.</p> <pre>>>> xrange(10) xrange(10)</pre>	<p>Python 3:</p> <pre>>>> xrange(10) Traceback (most recent call last): File "<stdin>", line 1, in <module> NameError: name 'xrange' is not defined</pre>
<p>Python 2: type of range</p> <pre>>>> r = range(10) >>> type(r) <type 'list'></pre>	<p>Python 3:</p> <pre>>>> r = range(10) >>> type(r) <class 'range'></pre>
<p>Python 2: type of xrange</p> <pre>>>> x = xrange(10) >>> print(type(x)) <type 'xrange'></pre>	<p>Python 3:</p> <pre>>>> x = xrange(10) Traceback (most recent call last): File "<stdin>", line 1, in <module> NameError: name 'xrange' is not defined</pre>

Python 2:

range: execution speed is slower

```
>>> import timeit
>>> r = 'range(10)'
>>> print(timeit.timeit(r))
0.359163158616
```

xrange: execution speed is faster

```
>>> r = 'xrange(10)'
>>> print(timeit.timeit(r))
0.232242625909
```

Python 3:

```
>>> r = 'range(10)'
>>> print(timeit.timeit(r))
0.21158485599971755
```

```
>>> x = xrange(1,20,2)
>>> for i in x:
...     print(i)
...
1
3
5
7
9
11
13
15
17
19
```

```
>>> r = range(10)
>>> r = range(1,20,2)
>>> for i in r:
...     print(i)
...
1
3
5
7
9
11
13
15
17
19
```

<https://stackoverflow.com/questions/94935/what-is-the-difference-between-range-and-xrange-functions-in-python-2-x>