Custom range generator

November 3, 2024

```
[34]: """Custom Range Generator
      Concepts: Iterators, generators
      Task: Write a generator function that mimics Python's range() with start,␣
       ↪stop, and step parameters.
      Goal: Learn to create generators that yield values and manage custom iteration␣
       ↪patterns."""
```

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[34]: 'Custom Range Generator\nConcepts: Iterators, generators\nTask: Write a
      generator function that mimics Python's range() with start, stop, and step
      parameters.\nGoal: Learn to create generators that yield values and manage
      custom iteration patterns.'
```

```python
[27]: def range_converter(start, stop, step=0):
          x = start
          if step == 0:
              raise ValueError("Step can not be zero")

          elif step > 0:
              x = start
              while x < stop:
                  yield x
                  x += step

          else:
              x = start
              while x > stop:
                  yield x
                  x += step
```

```python
[31]: print("Range with positive numbers")
      for i in range_converter(5,50,5):
          print(i)
```

```
Range with positive numbers
5
```

```
10
15
20
25
30
35
40
45
```

[32]:
```python
print("Range with negative numbers")
for i in range_converter(-5,50,2):
    print(i)
```

```
Range with negative numbers
-5
-3
-1
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
49
```

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