```
for x in [1, 2, 3, 4]: print(x ** 2, end=' ')
```

```
1 4 9 16
```

```
for x in 'spam': print(x * 2, end=' ')
```

```
ss pp aa mm
```

File Iterators

1. readline

```
f = open('/content/script1.py')
```

```
f.readline()
```

```
'#!/usr/bin/env python3\n'
```

```
f.readline()
```

```
'\n'
```

```
f.readline()
```

```
'# A first Python script\n'
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

```
f.readline()
```

2. **next** raises a built-in StopIteration exception at end-of-file instead of returning an empty string

```
f = open('script1.py')
```

```
f.__next__()
```

```
f.__next__()
```

```
f.__next__()
```

```
f.__next__()
```

```
f.__next__()
```

```
---------------------------------------------------------------------------
StopIteration                             Traceback (most recent call last)
<ipython-input-30-dcf180275632> in <cell line: 1>()
----> 1 f.__next__()

StopIteration:
```

```
for line in open('script1.py'):
    print(line.upper(), end='')
```

```
#!/USR/BIN/ENV PYTHON3

# A FIRST PYTHON SCRIPT

IF __NAME__ == '__MAIN__':
    IMPORT SYS
    PRINT(SYS.PLATFORM)
    PRINT(2 ** 100)
    X = 'SPAM!'
    PRINT(X * 8)
    #INPUT()
```

```
for line in open('script1.py').readlines():
    print(line.upper(), end='')
```

```
#!/USR/BIN/ENV PYTHON3

# A FIRST PYTHON SCRIPT

IF __NAME__ == '__MAIN__':
    IMPORT SYS
    PRINT(SYS.PLATFORM)
    PRINT(2 ** 100)
    X = 'SPAM!'
    PRINT(X * 8)
    #INPUT()
```

```
f = open('script1.py')
while True:
    line = f.readline()
    if not line: break
    print(line.upper(), end='')
```

```
#!/USR/BIN/ENV PYTHON3

# A FIRST PYTHON SCRIPT

IF __NAME__ == '__MAIN__':
    IMPORT SYS
    PRINT(SYS.PLATFORM)
    PRINT(2 ** 100)
    X = 'SPAM!'
    PRINT(X * 8)
    #INPUT()
```

Start coding or generate with AI.