

Iteration

Announcements

Return

Return Statements

A return statement completes the evaluation of a call expression and provides its value

$f(x)$ for user-defined function f : switch to a new environment; execute f 's body

return statement within f : switch back to the previous environment; $f(x)$ now has a value

Only one return statement is ever executed while executing the body of a function

```
def end(n, d):  
    """Print the final digits of N in reverse order until D is found.
```

```
>>> end(34567, 5)
```

```
7
```

```
6
```

```
5
```

```
"""
```

```
while n > 0:  
    last, n = n % 10, n // 10  
    print(last)  
    if d == last:  
        return None
```

(Demo)

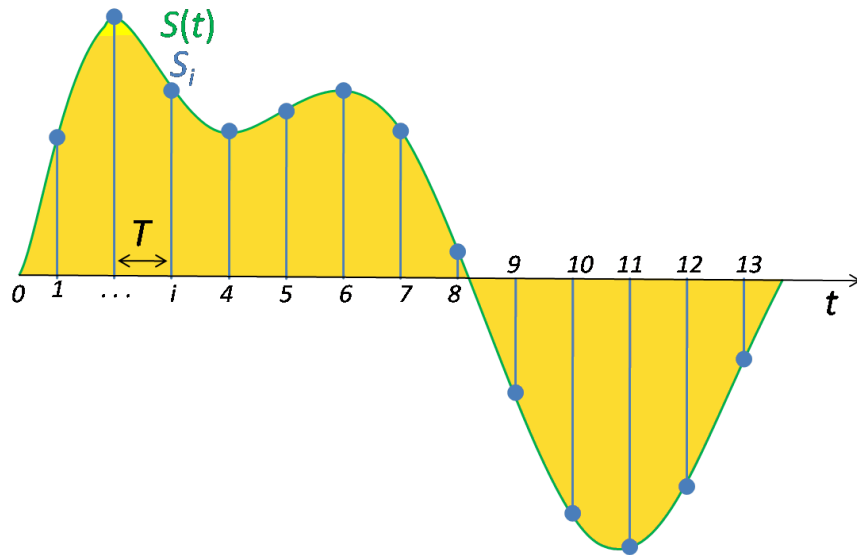
Self-Reference

(Demo)

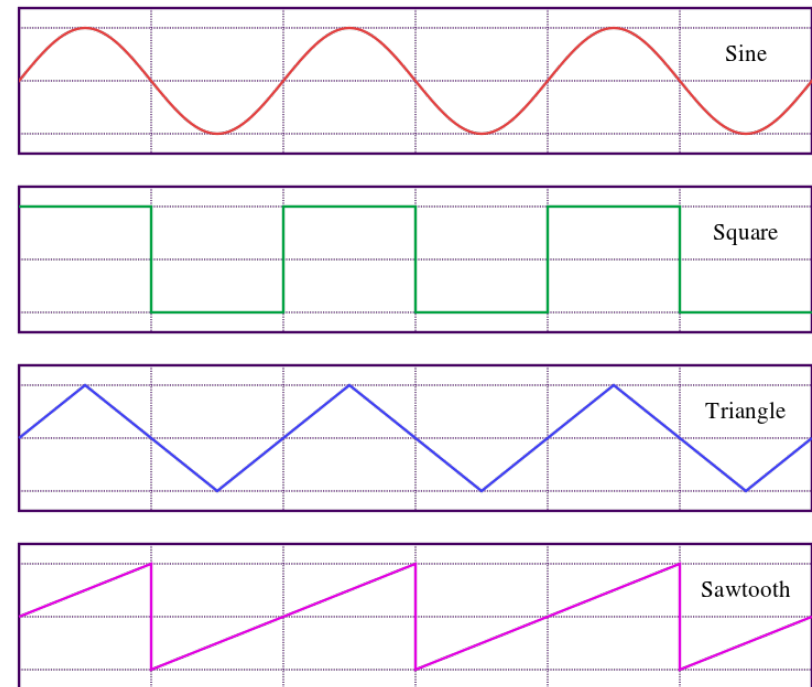
Function Example: Sounds

WAV Files

The Waveform Audio File Format encodes a sampled sound wave



A triangle wave is the simple wave form with the most pleasing sound



(Demo)