Passing Functions as Parameters
For Introduction to Programming Using Python
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In Python, you can pass functions as parameters in a function. Passing a function parameter is to pass the address of the function. We demonstrate this capability using the following example:

Listing 1 FunctionWithFunctionParameter1.py

```python
def f1(value):
    return 2 * value

def f2(value):
    return 3 * value

def m(t, f):
    for i in range(len(t)):
        t[i] = f(t[i])

def main():
    list1 = [1, 2, 3, 4]
    m(list1, f1)
    for i in range(0, 4):
        print(list1[i], end = " ")
    print()

    list2 = [1, 2, 3, 4]
    m(list2, f2)
    for i in range(0, 4):
        print(list2[i], end = " ")
    print()

main()
```

Sample output
```
2 4 6 8
3 6 9 12
```

Function **m** takes two parameters. The second parameter is a function that takes an **int** parameter and returns and **int** value.

The statement

```python
m(list1, f1)
```

invokes function **m** with two arguments. The second argument is function **f1**.

The statement

```python
m(list2, f2)
```

invokes function **m** with two arguments. The last argument is function **f2**.