Understanding Functions

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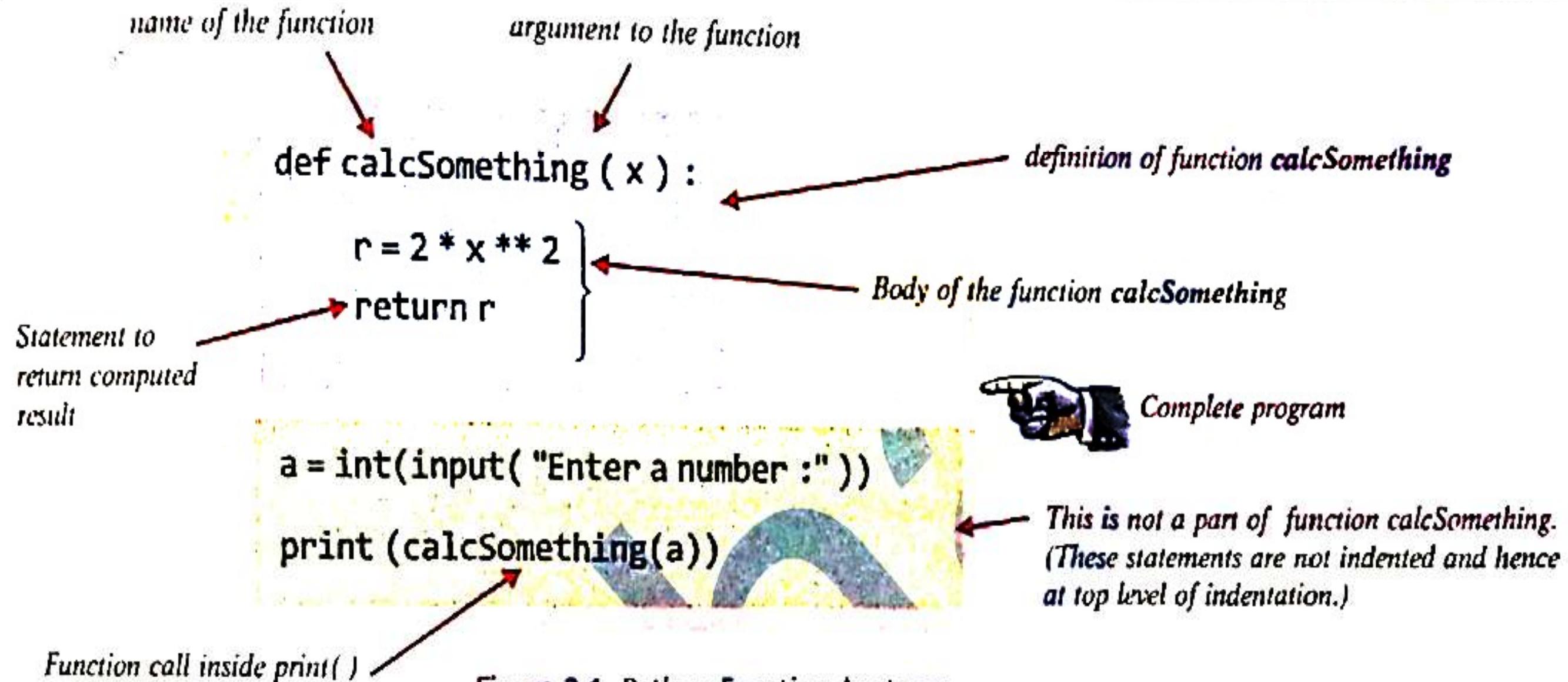
name of the function

argument to the function

definition of function **calcSomething**

```
def calcSomething ( x ) :
    r = 2 * x ** 2
    return r
```

Body of the function **calcSomething**

Statement to return computed result

Complete program

```
a = int(input( "Enter a number :" ))

print (calcSomething(a))
```

This is not a part of function calcSomething. (These statements are not indented and hence at top level of indentation.)

Function call inside print ( )

Figure 3.1 Python Function Anatomy

001 SIMPLE CALCULATIONS

```python
def calc(x):   1 usage
    r=2* x * 2
    return(r)


a=int(input("enter a number"))
print(calc(a))
```

Understanding Functions

➢ **Consider one more function definition given below:**

➢ **def cube (x):**

➢ **res = x**3   # cube of value in X**

➢ **return res   # return the computed value**

002 CUBE WITH FUNCTIONS

```python
def cube(x) :
    res=x**3
    return res
print(cube(8))
```

003 PASSING LITERAL AS ARGUMENTS

```python
def calc(x):  1 usage
    r=x**3
    return(r)
print(calc(4))
```

004 PASSING VARIABLES AS ARGUMENTS

```python
def calc(x):  1 usage
    r=x**3
    return(r)

num=4
print(calc(num))
```

005 PASSING INPUT AS ARGUMENTS

```python
def calc(x):  1 usage
    r=x**3
    return(r)
num=int(input("Enter Number: "))
print(calc(num))
```

```python
def calc(x):  1 usage
    r=x**3
    return(r)
print(calc(3))
```

007 FUNCTIONS INSIDE EXPRESSION

```python
def calc(x):  1 usage
    r=x**3
    return(r)
print(2 * calc(3))
```