

FUNCTIONS

- Reduces the amount of code
- Can be called anywhere in the notebook or cell
- Functions must be given a name
- Can contain multiple parameters or none at all
- A parameter can have default values

In [13]:

```
def square(arg1=20, arg2=50):  
    """This adds two numbers together"""  
    return( arg1 + arg2)
```

```
val = square(90, 110)  
type(square)
```

Out[13]:

function

In [15]:

```
def squared(num):  
    return num**2  
  
def cubed(num):  
    return num**3  
  
def quad(num):  
    return num**4  
  
v = 4  
print(squared(v))  
print(cubed(v))  
print(quad(v))  
total = squared(v) + cubed(v) + quad(v)  
total
```

16
64
256

Out[15]:

336

In [29]:

```
def greet():  
    """Enter the time and print appropriate greeting!"""  
    time = eval(input("Enter the time: "))  
  
    if time >= 6 and time < 12:
```

```
print("Good morning!")
return squared(time)

elif time >= 12 and time < 18:
    print("Afternoon!")
    return cubed(time)

elif time >= 18 and time < 21:
    print("Good evening!")
    return quad(time)

else:
    print("Good night!")
    return time
```

In [31]:

```
number = greet()
```

Enter the time: 7
Good morning!

In [32]:

```
number
```

Out[32]:

49