Defining a simple function.

```
def function_defining(str1):
    print(str1)
str1="python programming"
function_defining(str1)
```

Example of required arguments:

```
def required_arg(str1):
    print(str1)
function_defining('hai')
```

Example of keyword arguments:

```
def key_arg(name,age):
    print(name,age)
key_arg(age=50, name='John')
```

Example of default arguments:

```
def def_arg(name,age=20):
    print(name,age)

def_arg('John')

#or

def_arg(name='John')

#or

def_arg(name='John',age=50)

#or

def_arg('John',50)
```

Example of variable length arguments:

```
def var_length(*var1):
```

```
for i in var1:
    print(i)

var_length(1,2)
#or
var_length(10,20,30)
```

Example of return statement:

```
def add(a,b):
    return a+b
addition=add(10,5) #variable addition catches the returned
value
print(addition)
#OR
print(add(5,5))
```

Example of global and local variables:

```
total=0
def sum(v1,v2):
    total=v1+v2
    print("inside total: ",total)
sum(10,5)
print("outside total: ",total)
```