Function with no parameters

```
def greet():
    print("Hello, there!")

greet()  # Output: Hello, there!
```

Function with parameters

```
def add_numbers(a, b):
    return a + b

result = add_numbers(3, 5)
print(result)  # Output: 8
```

Function with default parameter value

```
def greet_person(name="Anonymous"):
    print("Hello, " + name + "!")

greet_person()  # Output: Hello, Anonymous!
greet_person("John")  # Output: Hello, John!
```

Function with variable number of arguments

```
def multiply(*args):
    result = 1
    for num in args:
        result *= num
    return result

result = multiply(2, 3, 4)
print(result)  # Output: 24
```

OOPS

```
# Class definition
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age

    def greet(self):
        print("Hello, my name is", self.name)

    def get_age(self):
        return self.age

# Creating objects (instances) of the class
person1 = Person("John", 25)
person2 = Person("Alice", 30)

# Accessing object attributes
print(person1.name)  # Output: John
print(person2.get_age())  # Output: 30

# Invoking object methods
person1.greet()  # Output: Hello, my name is John
person2.greet()  # Output: Hello, my name is Alice
```