# Python Functions

### 1.Function with return, without arguments

- Function Type 1

```python
def pie():
    return 3.14159265358979323846264338327950288419716939937510582097494459230781640 6286


a=int(input("Enter Radius: "))
print(a*a*pie())
```

### 2.Function with return, with arguments

- Function Type 2

```python
def area(a):
    return a*a*3.14159265358979323846264338327950288419716939937510582097494459230781640 6286

print(area(int(input("Enter Radius: "))))
```

### 3.Function without return, with arguments

- Function Type 3

```python
def area(a):
    print(a*a*3.14159265358979323846264338327950288419716939937510582097494459230781640 6286)
```

```python
area(int(input("Enter Radius: ")))
```

## 4.Function without return, without arguments

- Function Type 4

```python
def area():
    a=2
    print(a*a*3.14159265358979323846264338327950288419716939937510582097494459230781640286)

area()
```

## 5.Variable length arguments in python functions

- Variablelengthargs

```python
def myFun(**kwargs):
    for key, value in kwargs.items():
        print (f"{key} == {value}")

myFun(one ='Welcome', two ='To', three='Python')
```

## 6.Keyword arguments in python functions

- Keywordargs

```python
def sum(a,b,c):
    print(f"Sum: {a+b+c}")
```

```
sum(a=int(input("Enter a: ")),b=int(input("Enter b: ")),c=int(input("Enter c: ")))
sum(a=int(input("Enter a: ")),c=int(input("Enter c: ")),b=int(input("Enter b: ")))
```

## 7.Default arguments in python functions

- defaultargs

```
def area(a,pi=3.14159265358979323846264338327950288419716939937510582097494459230781640286):
    return a*a*pi

print(area(int(input("Enter Radius: "))))
```