

Introduction to predefined function and operation of python

#predefined function

#print(): Outputs text or variables to the console.

```
print("Hello, world!")
```

Hello, world!

#len(): Returns the length of an object (e.g., string, list, tuple).

```
my_list = [1, 2, 3, 4, 5]
```

```
length = len(my_list)
```

#input(): Reads input from the user through the console.

```
name = input("Enter your name: ")
```

#type(): Returns the type of an object.

```
number = 10
```

```
print(type(number)) # Output: <class 'int'>
```

#range(): Generates a sequence of numbers within a specified range.

```
numbers = list(range(5))
```

```
print(numbers)
```

Enter your name: niraj

<class 'int'>

[0, 1, 2, 3, 4]

#max()

```
numbers = [2.5, 3.7, 1.8, 4.9]
```

```
max_number = max(numbers)
```

```
print(max_number) # Output: 4.9
```

#float()

```
num_str = "3.14"
```

```
num_float = float(num_str)
```

```
print(num_float) # Output: 3.14
```

#str()

```
number = 42
```

```
num_str = str(number)
```

```
print(num_str) # Output: '42'
```

4.9
3.14
42

#operation of python

#1. Arithmetic Operations:

a = 10
b = 5

addition = a + b
subtraction = a - b
multiplication = a * b
division = a / b
floor_division = a // b
modulus = a % b
exponentiation = a ** b

print(addition)
print(subtraction)
print(multiplication)
print(division)
print(floor_division)
print(modulus)
print(exponentiation)

15
5
50
2.0
2
0
100000

#2. Comparison Operations:

x = 10
y = 20

print(x == y) # False
print(x != y) # True
print(x > y) # False
print(x < y) # True
print(x >= y) # False
print(x <= y) # True

False
True
False
True

```
False
True
```

#3. Assignment Operations:

```
a = 10
a += 5 # Equivalent to a = a + 5
print(a) # Output: 15
```

```
b = 20
b -= 3 # Equivalent to b = b - 3
print(b) # Output: 17
```

#4. Logical Operations:

```
p = True
q = False

print(p and q) # False
print(p or q)  # True
print(not p)   # False
```

```
15
17
False
True
False
```

#5. Membership Operations:

```
my_list = [1, 2, 3, 4, 5]

print(3 in my_list) # True
print(6 not in my_list) # True
```

#6. Identity Operations:

```
x = [1, 2, 3]
y = [1, 2, 3]
z = x

print(x is y) # False
print(x is not y) # True
print(x is z) # True
```

```
True
True
False
True
True
```