

Class 02 Assignment - March 3

✓ **Below are the GitHub repository with simple code examples for each of the following Python operators:**

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- Identity operators
- Membership operators
- Bitwise operators

Arithmetic Operators Example in Python

File: arithmetic_operators.py

```
a = 15
```

```
b = 4
```

```
print("Addition:", a + b)
```

```
print("Subtraction:", a - b)
```

```
print("Multiplication:", a * b)
```

```
print("Division:", a / b)
```

```
print("Modulus:", a % b)
```

```
print("Exponentiation:", a ** b)
```

```
print("Floor Division:", a // b)
```

Assignment Operators Example in Python

File: assignment_operators.py

```
x = 10
```

```
print("Initial value:", x)
```

```
x += 5
```

```
print("After += 5:", x)
```

```
x -= 3
```

```
print("After -= 3:", x)
```

```
x *= 2
```

```
print("After *= 2:", x)
```

```
x /= 4
```

```
print("After /= 4:", x)
```

```
x %= 3
```

```
print("After %= 3:", x)
```

```
x **= 2
```

```
print("After **= 2:", x)
```

```
x //= 2
```

```
print("After //= 2:", x)
```

Comparison Operators Example in Python

File: comparison_operators.py

```
a = 7  
  
b = 5  
  
print("a == b:", a == b)  
  
print("a != b:", a != b)  
  
print("a > b:", a > b)  
  
print("a < b:", a < b)  
  
print("a >= b:", a >= b)  
  
print("a <= b:", a <= b)
```

Logical Operators Example in Python

File: logical_operators.py

```
x = True  
  
y = False  
  
  
  
print("x and y:", x and y)  
  
print("x or y:", x or y)  
  
print("not x:", not x)
```

Identity Operators Example in Python

File: identity_operators.py

```
a = [1, 2, 3]
```

```
b = a
```

```
c = [1, 2, 3]
```

```
print("a is b:", a is b)    # True
```

```
print("a is c:", a is c)    # False
```

```
print("a is not c:", a is not c) # True
```

Membership Operators Example in Python

File: membership_operators.py

```
nums = [10, 20, 30, 40]
```

```
print("20 in nums:", 20 in nums)
```

```
print("50 not in nums:", 50 not in nums)
```

Bitwise Operators Example in Python

File: bitwise_operators.py

```
a = 10 # 1010
```

```
b = 4  # 0100
```

```
print("a & b:", a & b) # 0000
```

```
print("a | b:", a | b) # 1110
```

```
print("a ^ b:", a ^ b) # 1110
```

```
print("~a:", ~a)      # -(a+1)
```

```
print("a << 1:", a << 1) # 20
```

```
print("a >> 1:", a >> 1) # 5
```