# write a Python code to find the Maximum of these two numbers.

# Examples:

# Input: a = 2, b = 4

# Output: 4

# Input: a = -1, b = -4

# Output: -1

# Method #1: This is the naive approach where we will compare two numbers using if-else statement and will print the output accordingly

def find\_max\_1(a, b):

    if a == b:

        return "Both are equal"

    elif a > b:

        return "a greater than b"

    elif a < b:

        return "a less than b"

if \_\_name\_\_ == '\_\_main\_\_':

    print("\nMethod 1")

    print(find\_max\_1(2, 4))

    print(find\_max\_1(-1, -4))

# Method #2: Using max() function

# This function is used to find the maximum of the values passed as its arguments.

def find\_max\_2(a, b):

    return max(a, b)

if \_\_name\_\_ == '\_\_main\_\_':

    print("\nMethod 2")

    print("The maximum of two numbers is:", find\_max\_2(2, 4))

    print("The maximum of two numbers is:", find\_max\_2(-1, -4))

# Method #3: Using Ternary Operator

# This operator is also known as conditional expression are operators that evaluate something based on a condition being true or false. It simply allows testing a condition in a single line

def find\_max\_3(a, b):

    return "a is greater than b" if a > b else "a is less than b"

if \_\_name\_\_ == '\_\_main\_\_':

    print("\nMethod 3")

    print(find\_max\_3(2, 4))

    print(find\_max\_3(-1, -4))

# Method #4: Using lambda function

find\_max\_4 = lambda a, b: max(a, b)

if \_\_name\_\_ == '\_\_main\_\_':

    print("\nMethod 4")

    # print("The maximum of two numbers is:", find\_max\_4())

    # print("The maximum of two numbers is:", find\_max\_4())

    print("The maximum of two numbers is:", find\_max\_4(2, 4))

    print("The maximum of two numbers is:", find\_max\_4(-1, -4))

# Method #5: Using list comprehension

def find\_max\_5(a, b):

    result = [a if a > b else b]

    return result

if \_\_name\_\_ == '\_\_main\_\_':

    print("\nMethod 5")

    print("The maximum of two numbers is:", find\_max\_5(2, 4))

    print("The maximum of two numbers is:", find\_max\_5(-1, -4))

