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In [3]: #Name: Mohith Dande
# Part 1: Convert Two Numbers to Binary
# Let's pick two numbers: 9 and 10

# Convert to Binary:
# 9 in binary = 1001
# 10 in binary = 1010

# Part 2: Check if Each Binary String is a Palindrome
# A palindrome reads the same forward and backward.

# 1001 → reversed = 1001 Yes, it's a palindrome
# 1010 → reversed = 0101 No, it's not a palindrome

def is_binary_palindrome(n):
    binary = bin(n)[2:] # Convert to binary and remove '0b' prefix
    return binary == binary[::-1] # Check if palindrome

# Example numbers
numbers = [9, 10]

for num in numbers:
    binary = bin(num)[2:]
    result = is_binary_palindrome(num)
    print(f"{num} in binary is {binary} → Palindrome? {'Yes' if result else 'No'}")

9 in binary is 1001 → Palindrome? Yes
10 in binary is 1010 → Palindrome? No
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In [1]: