**AI FOR LLM- CSA1704**

**17.Write a Prolog Program to Sum the Integers from 1 to n.**

**CODE:**

# Recursive function

def sum\_recursive(n):

if n == 1:

return 1

return n + sum\_recursive(n - 1)

# Formula method (faster)

def sum\_formula(n):

return n \* (n + 1) // 2

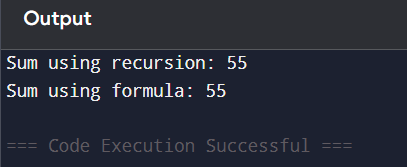
# Example usage

n = 10

print("Sum using recursion:", sum\_recursive(n))

print("Sum using formula:", sum\_formula(n))

**OUTPUT:**

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