**Assignment-3**

**Function Design and Modularization - Create a document that describes the design of two modular functions: one that returns the factorial of a number, and another that calculates the nth Fibonacci number. Include pseudocode and a brief explanation of how modularity in programming helps with code reuse and organization.**

**Factorial Function**

Pseudocode:

FUNCTION factorial(n)

IF n<=1THEN

RETURN1

ELSE

RETURN n\*factorial(n-1)

ENDIF

ENDFUNCTION

**Fibonacci Function**

Pseudocode:

FUNCTION fibonacci(n)

IF n<=0THEN

RETURN 0

ELSE IF n=1THEN

RETURN1

ELSE

RETURN fibonacci(n-1)+fibonacci(n-2)

ENDIF

ENDFUNCTION