Pseudocode for Factorial Calculation Assignment.

```
FUNCTION CalculateFactorial(n)
 IF n IS NOT AN INTEGER OR n < 0 THEN
  PRINT "Error: Input must be a non-negative integer."
  RETURN "Invalid Input"
 END IF
// Handle Edge Cases: Factorial of 0 and 1 is = 1.
 IF n = 0 OR n = 1 THEN
  factorial result = 1
 ELSE
 // Calculate Factorial using Iteration
 // Initialize result to 1
  factorial result = 1
  // Loop from 2 up to n (inclusive)
  FOR i FROM 2 TO n
   // Multiply the current result by the loop counter
   factorial_result = factorial_result * i
  END FOR
 END IF
 PRINT "The factorial of " + n + " is: " + factorial_result
 RETURN factorial_result
END FUNCTION
```