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/* Experiment No:- 5-1
Title      :-WAP to find the factorial of a number using Iterative Function
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#include <stdio.h>
// Iterative function to calculate factorial
int factorial_iterative(int a) {
    int fact = 1;

    // Calculating Factorial
    for (int i = 1; i <= a; i++) {
        fact = fact * i; // Multiply fact by i
    }
    return fact;
}
int main() {
    printf("\t\t\t\t\t*****Get a Factorial using Iterative Function*****\n");
    int x, result;
    // Enter a Non-negative integer
    printf("Enter Non-negative integer :");
    scanf("%d", &x);

    // Check for negative input
    if (x < 0) {
        printf("Factorial is not defined for negative numbers.\n");
    } else {
        // Calculate factorial
        result = factorial_iterative(x);
        // Display the result
        printf("Factorial of %d = %d\n", x, result);
    }
    printf("Thank you for using the Factorial Calculator\n");
    return 0;
}

/* output
Get a Factorial using Iterative Function*****
Enter Non-negative integer :7
Factorial of 7 = 5040
Thank you for using the Factorial Calculator*/

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