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#include <stdio.h>
#include <math.h> // Required for M_PI constant (a
precise value of PI)

int main() {
    // Variables to store user input (radius and
height) and results
    double radius, height;
    double volume, surface_area;

    // --- Input Section ---

    printf("Welcome to the Cylinder Calculator!
\n");

    // Prompt for the radius
    printf("Enter the radius (r) of the cylinder:
");
    // Use %lf for reading a double-precision
floating-point number
    if (scanf("%lf", &radius) != 1 || radius < 0) {
        printf("Invalid input. Please enter a
non-negative number for the radius.\n");
        return 1; // Exit with an error code
    }

    // Prompt for the height
    printf("Enter the height (h) of the cylinder:
");
    // Use %lf for reading a double-precision
floating-point number
    if (scanf("%lf", &height) != 1 || height < 0) {
        printf("Invalid input. Please enter a
non-negative number for the height.\n");
        return 1; // Exit with an error code
    }

    // --- Calculation Section ---
```