

Remove Comments from a C Program

This is a JavaScript program that removes comments from a C program. It can handle both single-line (`//`) and multi-line (`/* ... */`) comments. Additionally, it detects invalid comments and provides an error message if any are found.

Features

1. Removes valid single-line comments (`// ...`).
2. Removes valid multi-line comments (`/* ... */`).
3. Detects invalid comments (e.g., incomplete `/*` or `*/`) and prints an error message.
4. Reads a C file as input and outputs the modified program to the console.

How to Use

Prerequisites

1. **Node.js**: Ensure Node.js is installed on your system. You can download it from [here](https://nodejs.org/).
2. **C File**: Prepare a C file (e.g., `input.c`) that you want to process.

Steps to Run the Program

1. **Save the JavaScript File**:

- Save the provided JavaScript code in a file named `test1.js`.

2. **Prepare the C File**:

- Create a C file (e.g., `input.c`) in the same directory as the JavaScript file.
- Add your C code to this file.

3. **Run the Program**:

- Open a terminal or command prompt.
- Navigate to the directory where the JavaScript and C files are located.
- Run the program using the following command:

```
```bash
node test1.js
```
```

4. **View the Output**:

- The program will read the C file, remove valid comments, and print the modified code to the console. - If invalid comments are detected, an error message will be displayed.

Output:

```
C:\Users\furqan\OneDrive - csudh.edu\Documents\CSUDH\SEM 5 ( Spring 2025)\CSC-521 Adv Programming Language\Assignment 1>node test1.js
Error: Invalid comments detected.
```

```
#include <stdio.h>
#include <stdlib.h>

struct node
{
    int num;
    struct node *next;
};

void create(struct node **);
void makecycle(struct node **);
void release(struct node **);
int detectcycle(struct node *);

*/

int main()
{
    struct node *p = NULL;
    int result;

    printf("Enter data into the list\n");

    create(&p);

    makecycle(&p);

    printf("Identifying if a cycle exists.\n");

    result = detectcycle(p);

    if (result)
```