Exp. No. 6
Develop a lexical Analyzer to test whether a given identifier is valid or not using C.
Program:

```c
#include <stdio.h>
#include <ctype.h>
#include <string.h>

int main() {
    char a[10];
    int flag = 1, i = 1;

    printf("\nEnter an identifier: ");
    fgets(a, sizeof(a), stdin);

    // Remove newline character if present
    a[strcspn(a, "\n")] = '\0';

    // Check if the first character is a letter or underscore
    if (!isalpha(a[0]) && a[0] != '_') {
        flag = 0;
    } else {
        // Check the rest of the string
        while (a[i] != '\0') {
            if (!isalnum(a[i]) && a[i] != '_') {
                flag = 0;
                break;
            }
            i++;
        }
    }

    if (flag == 1) {
        printf("\nValid identifier\n");
    } else {
        printf("\nNot a valid identifier\n");
    }

    return 0;
}
```

```
Output

Enter an identifier: abc123

Valid identifier


=== Code Execution Successful ===
```