

Experiment -5

Develop a lexical Analyzer to test whether a given identifier is valid or not using c program.

Program:

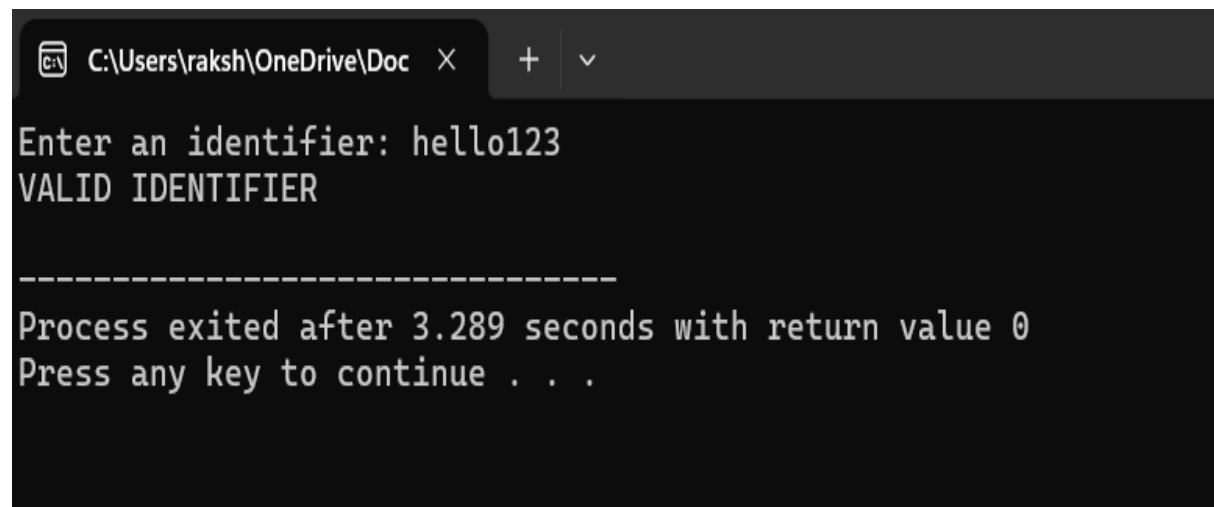
```
#include <stdio.h>
#include <ctype.h>

int isValidIdentifier(char str[]) {
    int i = 0;
    if (!(isalpha(str[0]) || str[0] == '_')) {
        return 0;
    }
    for (i = 1; str[i] != '\0'; i++) {
        if (!(isalnum(str[i]) || str[i] == '_')) {
            return 0;
        }
    }
    return 1;
}

int main() {
    char identifier[50];
    printf("Enter an identifier: ");
    scanf("%s", identifier);

    if (isValidIdentifier(identifier))
        printf("VALID IDENTIFIER\n");
    else
        printf("INVALID IDENTIFIER\n");
    return 0;
}
```

Output:



A screenshot of a Windows command prompt window. The title bar shows the file path 'C:\Users\raksh\OneDrive\Doc' and standard window controls. The command prompt displays the following text: 'Enter an identifier: hello123', 'VALID IDENTIFIER', a separator line of dashes, 'Process exited after 3.289 seconds with return value 0', and 'Press any key to continue . . .'. The user input 'hello123' is visible on the line following the prompt.

```
C:\Users\raksh\OneDrive\Doc > Enter an identifier: hello123
VALID IDENTIFIER

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Process exited after 3.289 seconds with return value 0
Press any key to continue . . .
```