ASSIGNMENT – 3

1. **Write a C program to test whether a given identifier is valid or not**
   Source Code:

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

int main(){
    char str[40],n;
    int flag=0,i;
    printf("Enter the Identifier: ");
    gets(str);
    n=strlen(str);
    if(! ((str[0]>='a' && str[0]<='z') || (str[0]>='A' && str[0]<='Z') || str[0]=='_')){
        flag=1;
    }

    for(i=1; i<n; i++){
        if (!((str[i] >= 'a' && str[i] <= 'z')|| (str[i] >= 'A' && str[i] <= 'Z')||
        (str[i] >= '0' && str[i] <= '9') || str[i] == '_')){
            flag=1;
        }
    }

    if (flag==1){
        printf("Its not a valid identifier");
    }else{
        printf("Its a valid identifier");
    }
    return 0;
}
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL

```
PS C:\Users\Sakshi Jain\Desktop\assignments\SS\ASS03> cd "c:\Users\Sakshi Jain\Desktop\assignm
ents\SS\ASS03\" ; if ($?) { gcc q1.c -o q1 } ; if ($?) { .\q1 }
Enter the Identifier: _xyz123
Its a valid identifier
PS C:\Users\Sakshi Jain\Desktop\assignments\SS\ASS03>
```

2. Write a C program to identify whether a given line is a comment or not.

Source Code:

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

int main(){
    int n;
    char line[100];
    printf("Enter comment: ");
    gets(line);
    n=strlen(line);
    if (line[0] == '/' && line[1] == '/') {
        printf("It is a single-line comment");
        return 1;
    }

    if (line[n- 2] == '*'&& line[n- 1] == '/' && line[0] == '/' && line[1] == '*') {
        printf("It is a multi-line comment");
        return 1;
    }

    printf("It is not a comment");
    return 0;
}
```