

System Software

Assignment - 3

Adm. No.: U19CS082

Name: SOURABH PATEL

1. Write a C program to test whether a given identifier is valid or not.

```
#include <stdio.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;
}
```

Output:

```
C:\Users\Sourabh Patel\Desktop\assignment\82\SEM6\SS\ASS3\Q1.exe
Enter the Identifier: num
Its a valid identifier
-----
Process exited after 15.07 seconds with return value 0
Press any key to continue . . .

C:\Users\Sourabh Patel\Desktop\assignment\82\SEM6\SS\ASS3\Q1.exe
Enter the Identifier: 1num
Its not a valid identifier
-----
Process exited after 16.07 seconds with return value 0
Press any key to continue . . .
```

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


```
3. #include <stdio.h>
4. #include<string.h>
5. int main(){
6.     int n;
7.     char line[100];
8.     printf("Enter comment: ");
9.     gets(line);
10.    n=strlen(line);
11.    if (line[0] == '/' && line[1] == '/') {
12.        printf("It is a single-line comment");
13.        return 1;
14.    }
```

```

15.     if (line[n- 2] == '*'&& line[n- 1] == '/' && line[0] == '/' && line[1]
== '*') {
16.         printf("It is a multi-line comment");
17.         return 1;
18.     }
19.     printf("It is not a comment");
20.     return 0;
21. }

```

Output:


 C:\Users\Sourabh Patel\Desktop\assignment\82\SEM6\SS\ASS3\Q2.exe

Enter comment: //your code goes here

It is a single-line comment

Process exited after 24.18 seconds with return value 1

Press any key to continue . . .


 C:\Users\Sourabh Patel\Desktop\assignment\82\SEM6\SS\ASS3\Q2.exe

Enter comment: your code goes here

It is not a comment

Process exited after 21.82 seconds with return value 0

Press any key to continue . . .

 C:\Users\Sourabh Patel\Desktop\assignment\82\SEM6\SS\ASS3\Q2.exe

Enter comment: /* your code goes here */

It is a multi-line comment

Process exited after 19.52 seconds with return value 1

Press any key to continue . . .