ASSIGNMENT : 1.

Q1. Write a C program to identify the valid identifiers/variables.

Code :

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
int isValidIdentifier (char str[]) {
    int i;
    if ((str[0] >= 'a' && str[0] <= 'z') || (str[0] >= 'A' &&
        str[0] <= 'z') || (str[0] == '_')) {
        for (int i=0; i<= strlen[str]; i++) {
            if ((str[i] >= 'a' && str[i] <= 'z') || (str[i] >= 'A'
                && str[i] <= 'z') && (str[i] >= '0' &&
                str[i] <= '9') && (str[i] == '_')) {
                return 1;
            }
        }
    }
    else {
        return 0;
    }
}
int main() {
    char str[1000];
    printf("Enter any identifier : ");
    scanf("%[^\n]s", &str);
```

Output :

Test case 1 :

Enter any identifier : var-1.
var1 is a valid identifier.

Test case 2 :

Enter any identifier : 1-var.
1-var is not a valid identifier.

Test case 3 :

Enter any identifier : -var1
-var1 is a valid identifier.

```
    if (isValidIdentifier (str) == 1) {
        printf ("%s is a valid identifier.", str);
    }
    else {
        printf ("%s is not a valid identifier.", str);
    }
    return 0;
}
```

02. Write a C program to identify the valid comments in C.

Code:

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

int isValidComment (char str[]) {
    if (str[0] == '/' && str[1] == '/') {
        return 1;
    }
    else if (str[0] == '/' && str[1] == '*' && str[strlen(str)-1]
        == '/' && str[strlen(str) - 2] == '*') {
        return 2;
    }
    else {
        return 0;
    }
}
```

Output :

Test case 1 :
Enter any comment in c : // comment
It is a valid comment.

Test case 2 :
Enter any comment in c : /* comment line */.
It is multi line comment.

Test case 3 :
Enter any comment in c : # comment.
It is not valid comment in C.

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```c
int main () {
    char str [1000] ;
    printf (" Enter any comment in C : ") ;
    scanf ("%[^\n]s", &str) ;
    if (isValidComment == 1) {
        printf (" It is a single line comment ") ;
    }
    else if (isValidComment == 2) {
        printf (" It is a multi line comment.") ;
    }
    else {
        printf (" It is not a valid comment in C.") ;
    }
    return 0 ;
}
```

— x —

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