

EXERCISE-27

AIM: To write a C program to check whether a given string is valid — i.e., it contains only alphanumeric characters (letters and digits), and optionally check for minimum length or no special characters depending on validation rules.

Algorithm:

- Start.
 - Read a string from the user.
1. Traverse each character of the string:
 2. If any character is not a letter (a-z, A-Z) or a digit (0-9), mark it as invalid.
 - 4.If all characters are valid, print "Valid String".
 - 5.Otherwise, print "Invalid String".
 - 6.End.

Program Code:

```
#include <stdio.h>

#include <ctype.h>

#include <string.h>

int main() {

    char str[100];

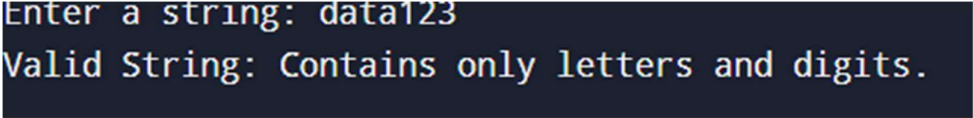
    int i, valid = 1;

    printf("Enter a string: ");

    scanf("%s", str); // Read a single word without spaces
```

```
for (i = 0; i < strlen(str); i++) {  
    if (!isalnum(str[i])) {  
        valid = 0;  
        break;  
    }  
}  
  
if (valid)  
    printf("Valid String: Contains only letters and digits.\n");  
else  
    printf("Invalid String: Contains special characters.\n");  
  
return 0;  
}
```

Input and Output:



```
Enter a string: data123  
Valid String: Contains only letters and digits.
```

Result:

The program successfully checks whether the input string is valid by verifying that it only contains alphanumeric characters.