

9.REVERSE THE GIVEN STRING WITHOUT CHANGING THE POSITION OF SPECIAL CHARACTERS

Aim:

To write a c program to reverse the given string without changing the special characters.

Algorithm:

Step 1:Start the program

Step 2:Get the string

Step 3:Reverse the string without altering the special characters present in the string.

Step 4:print the reversed string

Step 5:stop the program

Program coding:

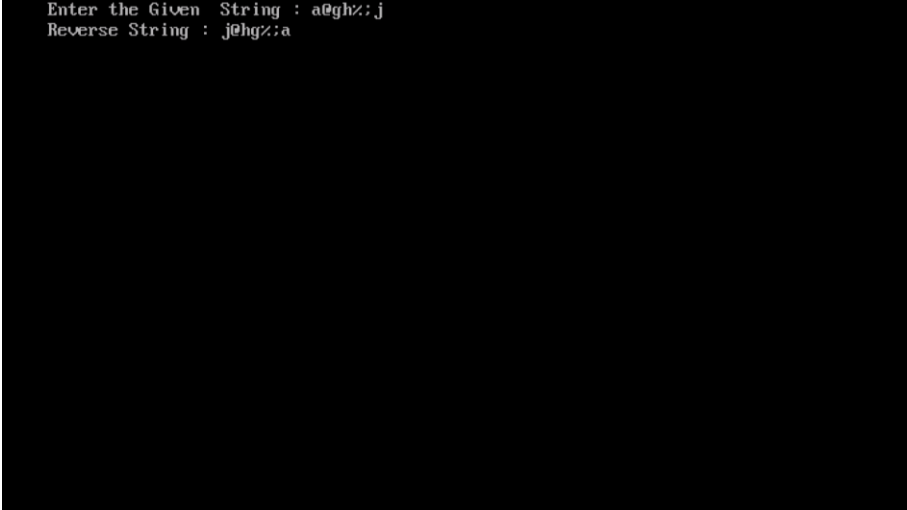
```
#include <stdio.h>
#include <string.h>
#include <conio.h>
void swap(char *a, char *b)
{
    char t;
    t = *a;
    *a = *b;
    *b = t;
}
// Main program
void main()
{
    char str[100];
    // Function Prototype
    void reverse(char *);
    int isAlpha(char);
    void swap(char *a ,char *b);
    clrscr();
```

```
    printf("Enter the Given String : ");  
    // scanf("%[^\n]s",str);  
    gets(str);  
    reverse(str);  
    printf("Reverse String : %s",str);  
    getch();  
}
```

```
void reverse(char str[100])  
{  
    // Initialize left and right pointers  
    int r = strlen(str) - 1, l = 0;  
  
    // Traverse string from both ends until  
    // 'l' and 'r'  
    while (l < r)  
    {  
        // Ignore special characters  
        if (!isAlpha(str[l]))  
            l++;  
        else if (!isAlpha(str[r]))  
            r--;  
  
        else  
        {  
            swap(&str[l], &str[r]);  
            l++;  
            r--;  
        }  
    }  
}
```

```
}  
  
Int isAlpha(char x)  
{return((x>='A'&& x<='Z') || (x>='a'&& x<='z'));  
}
```

Output:



```
Enter the Given String : a@ghz:j  
Reverse String : j@hgza
```