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**NPTEL** (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » **Problem Solving Through Programming In C (course)**



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Course outline

How does an NPTEL online course work? ()

Week 0 : ()

Week 1 ()

Week 2 ()

Week 3 ()

Week 4 ()

Week 5 ()

Week 6 ()

Week 7 ()

## Week 8 : Programming Assignment 4

**Due on 2023-09-21, 23:59 IST**

Write a C Program to reverse a given word using function. e.g. INDIA should be printed as AIDNI

| Private Test cases used for evaluation | Input | Expected Output                      | Actual Output                        | Status |
|--|-------|--------------------------------------|--------------------------------------|--------|
| Test Case 1                            | INDIA | The string after reversing is: AIDNI | The string after reversing is: AIDNI | Passed |
| Test Case 2                            | DELHI | The string after reversing is: IHLED | The string after reversing is: IHLED | Passed |

The due date for submitting this assignment has passed.

2 out of 2 tests passed.

You scored 100.0/100.

**Assignment submitted on 2023-09-21, 20:46 IST**

Your last recorded submission was :

```

1 #include<stdio.h>
2 #include<string.h>
3
4 void reverse(char[], int, int);
5 int main()
6 {
7     char str1[20];
8     scanf("%s", str1); //The string is taken as input form the test data.
9
10 /* Complete the program to print the string in reverse order using the functi
11 void reverse(char[], int, int);
12 Use the printf statement as
13 printf("The string after reversing is: %s\n", str1);
14 You can use different variable also.
```



**Week 8 ()****Week 9 ()****Week 10 ()****Week 11 ()****Week 12 ()****DOWNLOAD  
VIDEOS ()****Books ()****Text  
Transcripts ()****Problem  
Solving  
Session -  
July 2023 ()**

```

15 */
16 int length=strlen(str1);
17 reverse(str1,0,length-1);
18 printf("The string after reversing is: %s",str1);
19 return 0;
20 }
21 void reverse(char str[],int start,int end)
22 {
23     while(start<end)
24     {
25         char temp=str[start];
26         str[start]=str[end];
27         str[end]=temp;
28         start++;
29         end--;
30     }
31 }
32

```

Sample solutions (Provided by instructor)

```

1 #include<stdio.h>
2 #include<string.h>
3
4 void reverse(char[], int, int);
5 int main()
6 {
7     char str1[20];
8     scanf("%s", str1); //The string is taken as input form the test data.
9
10 /* Complete the program to print the string in reverse order using the functi
11 void reverse(char[], int, int);
12 Use the printf statement as
13 printf("The string after reversing is: %s\n", str1);
14 You can use different variable also.
15 */
16 int size;
17 size = strlen(str1);
18 reverse(str1, 0, size - 1);
19 printf("The string after reversing is: %s", str1);
20 return 0;
21 }
22
23 void reverse(char str1[], int index, int size)
24 {
25     char temp;
26     temp = str1[index];
27     str1[index] = str1[size - index];
28     str1[size - index] = temp;
29     if (index == size / 2)
30     {
31         return;
32     }
33     reverse(str1, index + 1, size);
34 }

```

