

**Aim:**

Design a C program that sorts the strings using array of pointers.

**Sample input output****Sample input-output -1:**

Enter the number of strings: 2

Enter string 1: Tantra

Enter string 2: Code

Before Sorting

Tantra

Code

After Sorting

Code

Tantra

**Sample input-output -2:**

Enter the number of strings: 3

Enter string 1: India

Enter string 2: USA

Enter string 3: Japan

Before Sorting

India

USA

Japan

After Sorting

India

Japan

USA

**Source Code:**

stringssort.c

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
void main()
{
    char * temp;
    int i,j,diff,n;
    char * strarray[10];
    printf("Enter the number of strings: ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("Enter string %d: ",i+1);
        strarray[i]=(char *)malloc(sizeof(char)*20);
        scanf("%s",strarray[i]);
    }
    printf("Before Sorting\n");
    for(i=0;i<n;i++)
    {
```

```

for(i=0;i<n-1;i++)
{
    for(j=0;j<n-1-i;j++)
    {
        diff=strcmp(strarray[j],strarray[j+1]);
        if(diff>0)
        {
            temp=strarray[j];
            strarray[j]=strarray[j+1];
            strarray[j+1]=temp;
        }
    }
}
printf("After Sorting\n");
for(i=0;i<n;i++)
{
    printf("%s\n",strarray[i]);
}
}

```

### Execution Results - All test cases have succeeded!

| Test Case - 1                  |
|--------------------------------|
| User Output                    |
| Enter the number of strings: 2 |
| Enter string 1: Tantra         |
| Enter string 2: Code           |
| Before Sorting                 |
| Tantra                         |
| Code                           |
| After Sorting                  |
| Code                           |
| Tantra                         |

| Test Case - 2                  |
|--------------------------------|
| User Output                    |
| Enter the number of strings: 3 |
| Enter string 1: Dhoni          |
| Enter string 2: Kohli          |
| Enter string 3: Rohit          |
| Before Sorting                 |
| Dhoni                          |
| Kohli                          |
| Rohit                          |
| After Sorting                  |
| Dhoni                          |
| Kohli                          |
| Rohit                          |