

Assignment-8

String

Name: Kishor Thagunna

Roll no: PUR077BEI018

```
//1. WAP to find the length of a given string without  
using a library function.
```

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

```
int main()
```

```
{
```

```
    char st[20];
```

```
    int i;
```

```
    printf("Enter the number :");
```

```
    gets(st);
```

```
    for (i=0;st[i]!='\0';i++);
```

```
    printf("Length of string is %d.",i);
```

```
    return 0;
```

```
}
```

//2. WAP to copy the content of a given string to another without using a library function.

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

```
int main()
```

```
{
```

```
    char st[20], cp[20];
```

```
    int i;
```

```
    printf("Enter the string :");
```

```
    gets(st);
```

```
    for (i = 0; st[i] != '\0'; i++)
```

```
        cp[i] = st[i];
```

```
    printf("The new string is %s.", cp);
```

```
    return 0;
```

```
}
```

//3. WAP to reverse a given string without using a library function.

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

```
int main(){
    char st[20],rev;
    int i,j,k;
    printf("Enter the string :");
    gets(st);
    for (i=0;st[i]!=0;i++);
    for (j=i-1,k=0;k<=i/2;k++,j--)
    {
        rev =st[j];
        st[j]=st[k];
        st[k]=rev;
    }
    printf("The reverse of the given string is %s",st);

    return 0;
}
```

//4.WAP to concatenate two given strings without using a library function.

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

```
int main()
```

```
{
```

```
    char st1[20], st2[20], st3[40];
```

```
    int i = 0, j = 0, k;
```

```
    printf("Enter the first string : ");
```

```
    gets(st1);
```

```
    printf("Enter the second string : ");
```

```
    gets(st2);
```

```
    for (i = 0; st1[i] != '\0'; i++)
```

```
        ;
```

```
    for (j = 0; st2[j] != '\0'; j++)
```

```
        ;
```

```
    for (k = 0; k < i; k++)
```

```
        st3[k] = st1[k];
```

```
    for (k; k <= i + j; k++)
```

```
        st3[k] = st2[k - i];
```

```
    printf("The concatenate of the two given string is %s.", st3);
```

```
    return 0;
```

```
}
```

```
// 5. WAP to compare two given strings without using  
a library function.
```

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

```
int main()
```

```
{
```

```
    char st1[20], st2[20];
```

```
    int i, j, k;
```

```
    printf("Enter the first string :");
```

```
    gets(st1);
```

```
    printf("Enter the second string :");
```

```
    gets(st2);
```

```
    for (i = 0; st1[i] != "\0"; i++);
```

```
    for (j = 0; st2[j] != '\0'; j++);
```

```
    for (k = 0; k < i; k++)
```

```
    {
```

```
        if (i == j)
```

```
        {
```

```
            if (st1[k] == st2[k])
```

```
                continue;
```

```
            else
```

```
                break;
```

```
        }
```

```
        else
```

```
            break;
```

```
    }
```

```
    if (k == i)
```

```
        printf("The two string are equal.");
```

```
    else
```

```
        printf("The two string are not equal.");
```

```
    return 0;
```

```
}
```

```
// 6. WAP to convert all characters in a given string  
to uppercase.
```

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

```
int main(){  
    char st[20];  
    int i,n;  
    printf("Enter the string :");  
    gets(st);  
    for(i=0;st[i]!='\0';i++)  
    {  
        n=st[i];  
        if(n<80)  
            continue;  
        else {  
            n=n-32;  
            st[i]=n;  
        }  
    }  
    printf("The uppercased string is %s",st);  
  
    return 0;  
}
```

```
// 7. WAP to find the number of vowels, consonants, digits and white spaces in a given string.
```

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

```
int main()
```

```
{
```

```
    char st[40];
```

```
    int i, vow = 0, con = 0, dig = 0, sp = 0;
```

```
    printf("Enter the string :");
```

```
    gets(st);
```

```
    for (i = 0; st[i] != '\0'; i++)
```

```
    {
```

```
        if (st[i] == 'a' || st[i] == 'e' || st[i] == 'i' || st[i] == 'o' || st[i] == 'u')
```

```
            vow++;
```

```
        else if (st[i] > 47 && st[i] < 58)
```

```
            dig++;
```

```
        else if (st[i] == ' ')
```

```
            sp++;
```

```
        else
```

```
            con++;
```

```
    }
```

```
    printf("The number of vowels is %d.\n", vow);
```

```
    printf("The number of conconents is %d.\n", con)
```

```
;
```

```
    printf("The number of digits is %d.\n", dig);
```

```
    printf("The number of spaces is %d.\n", sp);
```

```
    return 0;
```

```
}
```

```
// 8. WAP to count the number of words in a given line of text.
```

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

```
int main(){  
    char st[40];  
    int i,word=1;  
    printf("Enter the string :");  
    gets(st);  
    for(i=0;st[i]!='\0';i++)  
    {  
        if (st[i]==' ')  
            word++;  
    }  
    printf("The number of words is %d",word);  
    return 0;  
}
```



```
//9.WAP to check whether a given word is palindrome or not.
#include<stdio.h>
#include<string.h>

int main(){
    char st[40];
    int i, len2, len1;
    printf("Enter the sentence : ");
    gets(st);
    len2 = strlen(st);
    len1 = len2-1;
    for(i=0,len1;i<(len2/2);i++,len1--){
        if(st[i]==st[len1])
            continue;
        else
            break;
    }
    if((len2/2)==i)
        printf("\nThe given words is a palindrome.\n");
    else
        printf("The given word is not palindrome.");

    return 0;
}
```

```
// 10. WAP to sort n number of strings in lexicographical order (dictionary order).
```

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

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

```
int main(){
    char st[10][20],dic[20];
    int i,j,val;
    for(i=0;i<10;i++){
        printf("Enter the words:");
        gets(st[i]);
    }
    printf("In dictionary order:\n");
    for(i=0;i<10;i++)
    {
        for(j=i;j<10;j++)
        {
            strcpy(dic,st[i]);
            val=strcmp(st[j],st[i]);
            if(val<0)
            {
                strcpy(st[i],st[j]);
                strcpy(st[j],dic);
            }
        }
        printf("%s\n",st[i]);
    }
    return 0;
}
```