**String**

**Q1 - Write a program which accepts a sentence from the user and alters it as follows:**

**Every space is replaced by \*, case of all alphabets is reversed, digits are replaced by?**

#include<stdio.h>

#include<ctype.h>

#include<string.h>

int main()

{

char str[100];

printf("\n Enter any sentence:-");

scanf("%c",&str);

int i;

for(i=0;i<=strlen(str)-1;i++)

{

if(str[i]==' ')

str[i]='\*';

if(islower(str[i]))

str[i]=toupper(str[i]);

else

str[i]=tolower(str[i]);

if(isdigit(str[i]))

str[i]='?';

}

printf("\n %s \n",str);

}

**Output**

Enter any sentence:-Mahi 123

???\*iham

**Q2 - Write a program that accepts n strings and displays the longest string. Use array of strings.**

#include <stdio.h>

#include <string.h>

int main()

{

char string[10][30];

int i, n;

printf("Enter number of strings to input\n");

scanf("%d", &n);

printf("Enter Strings one by one: \n");

for(i=0; i< n ; i++)

{

scanf("%s",string[i]);

}

printf("The length of each string: \n");

for(i=0; i< n ; i++)

{

printf("%s ", string[i]);

printf("%d\n", strlen(string[i]));

}

return 0;

}

**Output**

Enter number of strings to input 3

Enter Strings one by one:

mahi

kolhe

cdac

The length of each string:

mahi 4

kolhe 5

cdac 4

**Q3 - Write a menu driven program to perform the following operations on strings using standard library functions: Length, Reverse ,Concatenation,Copy, Compare, Exit.**

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

int main()

{

char str1[20],str2[20];

int ch,i,j;

do

{

printf("\tMENU");

printf("\n------------------------------\n");

printf("1:Find Length of String");

printf("\n2:Find Reverse of String");

printf("\n3:Concatenate Strings");

printf("\n4:Copy String ");

printf("\n5:Compare Strings");

printf("\n6:Exit");

printf("\n------------------------------\n");

printf("\nEnter your choice: ");

scanf("%d",&ch);

switch(ch)

{

case 1:

printf("Enter String: ");

scanf("%s",str1);

i=strlen(str1);

printf("Length of String : %d\n\n",i);

break;

case 2:

printf("Enter String: ");

scanf("%s",str1);

strrev(str1);

printf("Reverse string : %s\n\n",str1);

break;

case 3:

printf("\nEnter First String: ");

scanf("%s",str1);

printf("Enter Second string: ");

scanf("%s",str2);

strcat(str1,str2);

printf("String After Concatenation : %s\n\n",str1);

break;

case 4:

printf("Enter a String1: ");

scanf("%s",str1);

printf("Enter a String2: ");

scanf("%s",str2);

printf("\nString Before Copied:\nString1=\"%s\",String2=\"%s\"\n",str1,str2);

strcpy(str2,str1);

printf("-----------------------------------------------\n");

printf("\"We are copying string String1 to String2\" \n");

printf("-----------------------------------------------\n");

printf("String After Copied:\nString1=\"%s\", String2=\"%s\"\n\n",str1,str2);

break;

case 5:

printf("Enter First String: ");

scanf("%s",str1);

printf("Enter Second String: ");

scanf("%s",str2);

j=strcmp(str1,str2);

if(j==0)

{

printf("Strings are Same\n\n");

}

else

{

printf("Strings are Not Same\n\n");

}

break;

case 6:

exit(0);

break;

default:

printf("Invalid Input. Please Enter valid Input.\n\n ");

}

}while(ch!=6);

return 0;

}

**Output**

MENU

------------------------------

1:Find Length of String

2:Find Reverse of String

3:Concatenate Strings

4:Copy String

5:Compare Strings

6:Exit

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Enter your choice: 1

Enter String: Mahikolhe

Length of String : 9