1. Write a program to find the length of a string without using strlen().

#include <stdio.h>

int main() {

char str[100];

int i = 0;

printf("Enter a string: ");

gets(str);

while (str[i] != '\0') {

i++;

}

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

return 0;

}

1. Write a program to copy one string to another.

#include <stdio.h>

int main() {

char src[100], dest[100];

int i;

printf("Enter source string: ");

gets(src);

for (i = 0; src[i] != '\0'; i++) {

dest[i] = src[i];

}

dest[i] = '\0';

printf("Copied string: %s\n", dest);

return 0;

}

1. Write a program to concatenate two strings.

#include <stdio.h>

int main() {

char str1[100], str2[100];

int i = 0, j = 0;

printf("Enter first string: ");

gets(str1);

printf("Enter second string: ");

gets(str2);

while (str1[i] != '\0') i++;

while (str2[j] != '\0') {

str1[i++] = str2[j++];

}

str1[i] = '\0';

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

return 0;

}

1. Write a program to compare two strings.

#include <stdio.h>

int main() {

char str1[100], str2[100];

int i = 0, flag = 0;

printf("Enter first string: ");

gets(str1);

printf("Enter second string: ");

gets(str2);

while (str1[i] != '\0' || str2[i] != '\0') {

if (str1[i] != str2[i]) {

flag = 1;

break;

}

i++;

}

if (flag == 0)

printf("Strings are equal.\n");

else

printf("Strings are not equal.\n");

return 0;

}

1. Write a program to count vowels and consonants in a string.

#include <stdio.h>

int main() {

char str[100];

int i, vowels = 0, consonants = 0;

printf("Enter a string: ");

gets(str);

for (i = 0; str[i] != '\0'; i++) {

char c = str[i];

if ((c >= 'A' && c <= 'Z') || (c >= 'a' && c <= 'z')) {

c = tolower(c);

if (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u')

vowels++;

else

consonants++;

}

}

printf("Vowels: %d\nConsonants: %d\n", vowels, consonants);

return 0;

}

1. Write a program to convert lowercase to uppercase and vice versa.

#include <stdio.h>

int main() {

char str[100];

int i;

printf("Enter a string: ");

gets(str);

for (i = 0; str[i] != '\0'; i++) {

if (str[i] >= 'a' && str[i] <= 'z')

str[i] = str[i] - 32;

else if (str[i] >= 'A' && str[i] <= 'Z')

str[i] = str[i] + 32;

}

printf("Converted string: %s\n", str);

return 0;

}

1. Write a program to check if a string is palindrome.

#include <stdio.h>

#include <string.h>

int main() {

char str[100];

int i, len, flag = 0;

printf("Enter a string: ");

gets(str);

len = strlen(str);

for (i = 0; i < len / 2; i++) {

if (str[i] != str[len - i - 1]) {

flag = 1;

break;

}

}

if (flag == 0)

printf("String is a palindrome.\n");

else

printf("String is not a palindrome.\n");

return 0;

}

1. Write a program to reverse a string.

#include <stdio.h>

#include <string.h>

int main() {

char str[100], rev[100];

int i, len;

printf("Enter a string: ");

gets(str);

len = strlen(str);

for (i = 0; i < len; i++) {

rev[i] = str[len - i - 1];

}

rev[i] = '\0';

printf("Reversed string: %s\n", rev);

return 0;

}

1. Write a program to count words in a string.

#include <stdio.h>

int main() {

char str[100];

int i, words = 1;

printf("Enter a string: ");

gets(str);

for (i = 0; str[i] != '\0'; i++) {

if (str[i] == ' ' && str[i+1] != ' ' && str[i+1] != '\0')

words++;

}

printf("Number of words: %d\n", words);

return 0;

}

1. Write a program to find the frequency of each character in a string.

#include <stdio.h>

#include <string.h>

int main() {

char str[100];

int freq[256] = {0}, i;

printf("Enter a string: ");

gets(str);

for (i = 0; str[i] != '\0'; i++) {

freq[(unsigned char)str[i]]++;

}

printf("Character frequencies:\n");

for (i = 0; i < 256; i++) {

if (freq[i] > 0)

printf("%c: %d\n", i, freq[i]);

}

return 0;

}