STRING HANDLING IN C++

CONTENTS:

- String
- String inputs
- Array of string
- String function

STRING

- A collection of characters written in double quotation is called string.
- It may consist of alphabatic characters, digits and special symbols.

STRING DECLARATION

C++ stores a string as an array of characters. An array is a group of contegious memory location that can be stored same type of data.

So, the string declaration is same as array declaration. e.g

- int a[20]
- char ch[50] etc.

STRING INITIALIZATION

A string variable can be initialized with a string value as follows:

char str[50]=“oop in c++”;

It can also initialize without defining the length of string:

Char a[]=“pakistan”;

STRING INPUTS

THE CIN OBJECT

- The cin object is used to input a string value without any blank space. It does not support a string with spaces.

CIN.GETLINE()

- The cin object is used to input a string value including blank space.
- The syntax of this function is:
- Cin.getline(str,len);

CIN.GET ()

The get() function of cin object is used to input a single character. The syntax of this function is as follows:

cin.get(ch);

STRING FUNCTIONS (STRING.H)

STRCMP():

The strcmp() is used to compare two string character by character.It return 0 for two equal strings,1 for first string is greater than second string and -1 for first string is less than second string

Syntax:

strcmp(str1,str2);

```
#include <iostream>
#include <cstring>
using namespace std;
int main()
{
char string1[];
char string2[];
int result;
cout << "enter first string: " << endl;
cin >> string1;
cout << "enter second string: " << endl;
cin >> string2;
result = strcmp( string1, string2 );
switch( result )
 {
 case ( 1 ):
cout << "First string is greater than second string " << endl;
break;
case ( -1 ):
 cout << "First string is less than second string " << endl; }
```

STRCPY()

The word strcpy stand for string copy.so the function strcpy() is used to copy one string to another.

Syntax:

strcpy(str1,str2);

```
/* strcpy example */
#include <iostream>
#include <string.h>
int main ()
{
char str1[]="Sample string";
char str2[40];
char str3[40];
strcpy (str2,str1);
strcpy (str3,"copy successful");
Cout<<str1<<str2<<str3<<endl;
}
```

STRLEN():

The word strlen stands for string length. The function is used for find the length of string. This includes all character and spaces as well

Syntax:

strlen(str);

```
#include<iostream>
#include<cstring>
using namespace std;
int main()
{
char data[50];
int size=0;;
cout<<"please input the word\n";
cin>>data[50];
size=strlen(data);
cout<<"the number of letters is "<<size;
return 0;
}
```

STRCAT()

Strcat() is used to append a copy of one string to the end of another;

Syntax:

strcat(str1,str2);

```
//Example concatenates two strings to output //By
asking the user for input
#include <cstring>
#include <iostream>
using namespace std;
int main()
{
char s1 = new char[30];
char s2 = new char[30];
cout<<"Enter string one(without spaces): ";
cin>>s1;
cout<<"Enter string two(without spaces): ";
cin>>s2;
 cout<<strcat(s1, s2);
 }
```


Thank
You!