

Concept of Array (String)

<pre>char ch='a' printf("\n ch = %c",ch);</pre>	<pre>ch = a</pre>
<pre>char c; scanf("%c",&ch); printf("\n ch = %c",ch);</pre>	<pre><u>a</u> ch = a</pre>

Above a program store only one character but when we store number of character then we use string array

String is collection of character

Ex. we store 'allahabad' then no. of character in 'allahabad' is 9 and last character is must be NULL character denoted by '\0'. So total character in 'allahabad' is 10

Then we declare character type array and number of character is 10 or more

```
char str[10];
```

A	l	l	a	h	a	b	a	d	'\0'
0	1	2	3	4	5	6	7	8	9

```
char str[10]="Allahabad";

char str[10]={ 'A', 'l', 'l', 'a', 'h', 'a', 'b', 'a', 'd', '\0'};
```

```
printf(" %s",str)
```

Allahabad

```
int i;

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

    printf("%c",str[i]);
```

Allahabad

```
char str[10];

printf("\n Enter Any String ");

scanf("%s",str);

printf("\n String = %s",str);
```

Enter Any String Allahabad

String = Allahabad

```
char str[20];

printf("\n Enter Any String ");

scanf("%s",str);

printf("\n String = %s",str);
```

Enter Any String Allahabad Station

String = Allahabad

Allahabad station but store Allahabad because having space between Allahabad and station means neglect all character after space so store only Allahabad

```
char str[20];
```

```
printf("\n Enter Any String ");
```

```
gets(str);
```

```
printf("\n String = %s",str);
```

Enter Any String Allahabad Station

String = Allahabad

gets() function receives a string from the keyboard

puts() function display a string to the screen

```
main()
```

```
char name[20];
```

```
printf("\n Enter your full name ");
```

```
gets(name);
```

```
puts(name);
```

```
}
```

Enter your full name Allahabad Station

Allahabad Station

getchar() is function is used to store single charater ex. str=getcher() putchar() is function is used to display single character ex. putchar(str)	
<pre> void main() { char str[20]; int i=0; printf("\n Enter any string "); while((str[i]=getchar())!='\n') i++; str[i]='\0'; printf("\n String = %s",str); } </pre>	Enter Any String <u>Allahabad Station</u> String = Allahabad Station
String length	
With header file <stding.h>	Without library file

<pre>char str[10]="Allahabad"; int l; l=strlen(str); printf("\n String length = %d",l);</pre>	<pre>int strlen(char str[]) { int i=0; while(str[i]!='\0') i++; i=i-1; return(i); }</pre>
Output: String length = 9	
String copy	
<pre>char str1[10]="Allahabad"; char str2[10]; strcpy(str2,str1); printf("\n 1 st string = %s",str1); printf("\n 2 nd string = %s",str2);</pre>	<pre>void strcpy(char str2[], char str1[]) { int i; i=0; while(str1[i]!='\0') str2[i]=str1[i]; str2[i]='\0'; }</pre>
1 st string = Allahabad 2 nd string = Allahabad	

String Reverse

```
char str1[10]="Allahabad";  
char str2[10];  
printf("\n String :%s",str);  
strrev(str);  
printf("\n Revesr : %s",str);
```

```
reverse(char str2[10], char str1[10])
```

```
int l,i,j=0;  
l=strlen(str1);  
for(i=l-1;i>=0;i--)
```

```
{
```

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

```
    j++;
```

```
}
```

```
str2[j]='\0';
```

```
}
```

String : Allahabad

Revesr : dabahalla

String Append one string to another “Concatenate”

```
#include<string.h>  
void main()
```

```
void strcatanete(char str1[20], char str2[10]);  
void main()
```

<pre> { char str1[20]="Allahabad"; char str2[10]="City"; clrscr(); strcat(str1,str2); printf("\n %s",str1); getch(); } </pre>	<pre> { char str1[20]="Allahabad"; char str2[10]="City"; clrscr(); strcatcanete(str1,str2); printf("\n %s",str1); getch(); } void strcatcanete(char str1[20], char str2[10]) </pre>
AllahabadCity	<pre> { int i,j; i=0; while(str1[i]!='\0') i++; str1[i++]=' '; //for space j=0; while(str2[j]!='\0') { str1[i]=str2[j]; i++; j++; } str1[i]='\0'; } </pre>