

* **String s** :- (Array of characters) → **char** | **buinif ("./o", size of (int));**

Name	Address
(Text Data)	

- ① char Constant → 'A'
- ② String Constant → "PASS"

int main()

```
{
    char result = 'P';
    P
    1 Byte
```

buinif ("My Result = %c", result);

char res [s] = "PASS".

```
P A S S \0
```

String

Variable

buinif ("In new Result = %s \n", res);

butts (res); // put string

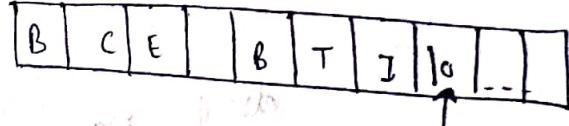
}

11 Input / output of a string

```
int main () {
    int i, v = 0, lom = 0;
    char name [30];
    bimf ("Enter your name: ");
    Scans ("%.s", name); // BCEBTI
    get ← gets (name); // BCE BTI
    String
    bimf ("Your name = %.s", name); // BCE BTI
    puts (name);

    for (i = 0; name [i] != 'l0'; i++)
    {
        bimf ("%.c", name [i]);
        switch (name [i])
        {
            Case 'A': Case 'E': Case 'I': Case 'O': Case 'U':
                v++;
        }
        break;
    }
    lom++;
}

bimf ("In vowels = %d, length = %d", v, lom);
```



HomeWork

Q- Input a string and Count Capital & Small. letters in string.

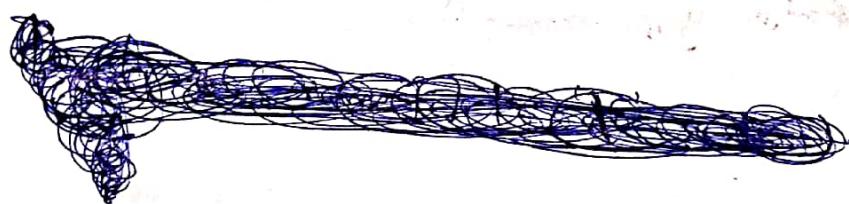
A-

```
int main()
{
    int i, v=0, m=0;
    char name [20];
    printf ("Enter your name: \n");
    gets (name);
    for (i=0 ; name [i] != '\0' ; i++)
    {
        if ((name [i] >= 65 && name [i] <= 90)
            v++;
        else if ((name [i] >= 97 && name [i] <= 122))
            m++;
    }
    printf ("Capital letters = %d\n", v);
    printf ("Small letters = %d\n", m);
}
```

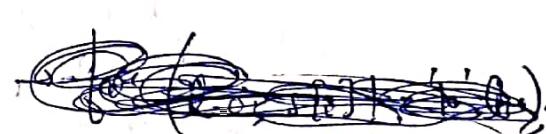
Q - Input a string and print it in reverse order.

A - int main()

```
{  
    int i, length = 0;  
    char name [20];  
    cout << "Enter your name : ";  
    gets (name);
```



```
for (i=0; name[i] != '\0', i++)  
{  
    length++; ✓
```



```
for (i = length - 1; i >= 0; i--)  
{  
    cout << "%c", name [i]); ✓  
}
```

```
}
```

Q - Input a string and copy it to another string.

A -

```
int main()
```

```
{
```

```
    int i;
```

```
char name [20], Prince [50];
```

```
printf ("Enter your name");
```

```
gets (name);
```

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

```
{
```

```
    Prince[i] = name[i];
```

```
}
```

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

```
}
```

Q1

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

```
{
```

```
    Prince[i] = name[i];
```

```
}
```

```
Prince[i] = '\0';
```

```
printf ("%s", Prince);
```

|| String Library Functions

```
int main()
{
    char s1[100];
    printf("Enter string");
    gets(s1);
    Strupper(s1);
    printf("In Upper Case = %s", s1);
    Strlower(s1);
    printf("In Lower Case = %s", s1);
    int len = Strlen(s1); // For this use <i>string.h>
    printf("In Length = %d", len); // with Argument with
    char copy[100]; // return.
    Strcpy(copy, s1);
    printf("In In Copied string = %s", copy);
    Strrev(copy);
    printf("In Reversed string = %s", copy);
    Char fn[30] = "RAJESH", ln[15] = "BANSAL";
    StrCat(fn, ln); // Joining the strings
    printf("In Full Name = %s", fn);
    for space:- StrCat(fn, "-");
    StrCat(fn, ln);
    printf("In Full name = %s", fn);
```

Comparison
of
two
strings

```
char Pwd[20], Mfp[20];  
printf ("Enter password");  
Gets (Pwd);  
printf ("Verify password");  
Gets (Mfp);  
int resfp = strcmp (Pwd, Mfp); // with Argument with  
if (resfp == 0) return  
    printf ("Same");  
else  
    printf ("Not Same");
```

HOME WORK

Q- Write a program for Converting the string from upper Case to lower Case without using library functions.

A- int main()

```
{ int i;  
char s[40];
```

```
printf ("Enter string : \n");
```

```
gets (s);
```

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

```
{  
    if (s[i] >= 65 && s[i] <= 90)
```

```
        s[i] = s[i] + 32;
```

```
}  
printf ("%s", s);
```

Q- Write a program for Converting the string from upper to lower and lower to upper Case without using library functions.

A- int main()

```
{ int i;
```

```
char s[40];
```

```
printf ("Enter string : \n");
```

```
gets (s);
```

for ($i = 0$; $s[i] != ' \backslash 0'$; $i++$)

{
if ($s[i] >= 65$ & $s[i] <= 90$)

$s[i] = s[i] + 32;$

else if ($s[i] >= 97$ & $s[i] <= 122$)

$s[i] = s[i] - 32;$

}

buimtf ("%.s", s);

}

Q- Input two strings and Concatenate them without Using Library functions.

A- int main()

{
int i;

char A[40], B[30];

By Sir :-

for ($i = 0$; $a[i] != ' \backslash 0'$; $i++$).

$a[i] = '-'$;

$i = i + 1$;

for ($j = 0$; $b[j] != ' \backslash 0'$; $j++$)

$a[i + j] = b[j]$;

for ($i = 0$;

$a[i + j] != ' \backslash 0'$;

buta(a);

}



Q - Write a program to input a string & reverse its original content.

A - int main

```
{ int i; int l=0, temp;
```

```
char A[20];
```

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

```
gets(A);
```

~~for (l=0; A[i] != '\0'; l++);~~~~for (i=0; A[i] != '\0'~~~~for (i=0; A[i] != '\0' ; i++)~~

```
{ l++;  
}
```

~~for (i=0 ; i < l/2 ; i++)~~

```
{ temp = A[i];
```

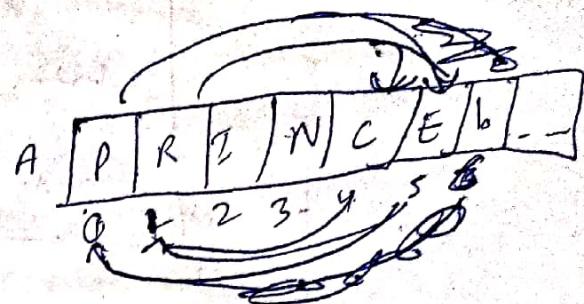
```
 A[i] = A[l-1];
```

```
 A[l-1] = temp;
```

```
} l--;
```

```
 printf ("%s", A);
```

```
}
```



output

Enter Your father's Name:- Pawstam

Non-Sense

Enter your father Name :- Sh. Pawstam Bawr

Good Boy

int main()

{

int i

char name[30]; ←

printf (" Enter your father name : \n");

~~scanf~~ gets (name);

~~for (i = 0; i < 30; i++)~~

~~name[i] = ' ', name[i + 1] = '\0';~~

if (name [0] == 'S' && name [1] == 'h')

 printf (" Good boy");

Else

 printf (" Non Sense");

Output

```
int main()
```

```
{
```

```
    int i; intl  
    char Pic [30];
```

```
    printf(" Enter image filing: \n");
```

```
    gets (Pic);
```

```
    for (l=0; Pic[l] != '\0'; l++);
```

```
    if (l < 3) {
```

```
        if (Pic[0] == 'A' && Pic[1] == 'B' && Pic[2] == 'C')
```

```
            printf(" what is this !! ");
```

```
        else if (Pic[0] == 'P' && Pic[1] == 'R' && Pic[2] == 'G')
```

```
            printf(" Good Job ");
```

(*)

```
if (Pic[l-1] == 'G' && Pic[l-2] == 'P' && Pic[l-3] == 'J')
```

```
    printf(" Good Job ");
```

Else

```
    printf(" what is this !! ");
```

image.txt
→ What is this !!
image.jpg
→ Good Job

Q - Write a program to input multiple words from user in string and then calculate them.

A - int main()

```
{    int i; int v=0;
    char name[10];
    printf ("Enter string : \n");
    gets (name);
    for (i=0 ; s[i]!='\0' ; i++)
    {
        if (s[i] == '-' && s[i+1] == '-')
            v++;
    }
    printf ("%d", v);
}
```

Q - Write a program to replace all digits of a string with *.

A - int main()

```
{    int i;
    char s[40];
    printf (" Enter string : \n");
    gets (s);
    for (i=0 ; s[i]!='\0' ; i++)
    {
```

```

    } (s[i] >= 48 && s[i] <= 57)
        s[i] = '*';
    }
    puts(s);
}

```

Q- Write a program for function of reverse a string.

A-

```

int main()
{
    char s[40];

```

```
    gets(s);

```

```
    void reverse mystring (char *s);

```

```
    reverse mystring (s);

```

```
    printf ("%s", s);
}
```

```
void reverse mystring (char *s)
{

```

```
    int l, i, j;

```

```
    for (l = 0; s[l] != '\0'; l++);

```

```
    j = l - 1;

```

```
{@ (i = 0; i < l/2; i++)

```

```
{
    char ch = s[i];

```

```
    s[i] = s[j];

```

```
    s[j--] = ch;
}
```

```
}
```

B- 2-D String for Students

A-

```
int main ()  
{  
    char list [s] [20] → size of string;  
    int i=0;  
    for (i=0; i<s; i++)  
    {  
        printf ("Enter the name of %d student : ", i+1);  
        gets (list[i]);  
    }  
  
    printf ("In The List of students : ");  
    for (i=0; i<s; i++)  
    {  
        puts (list[i]);  
    }  
}
```