STRINGS

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Collection of characters

```
char str[20] = "Delhi";
char str[20] = {'D', 'e', 'l', 'h', 'i', '\0'};
```

\t \a

Q. WAP to input string character by character (by using %c format specifier)

```
void main()
{
char str[20], c,
int i=0;
printf("Enter string \n");
do
{
   scanf("%c", &str[i]);        | getchar(str[i])
    i++;                        | str[i] = getchar();
} while (str[i-1] != '\n');

 str[i-1] = '\0';
 i = 0;
 while (str[i] != '\0')
 {
    printf("%c", str[i]);
    i++;
 }
getch();
}
```

Q. WAP to input string using %s format specifier on a single string.

```
void main()
{
   char str[20];
   printf("Enter string");
   scanf("%s", str);
   printf("%s", str);
                getch();
}
```

#include <string.h> - for turbo C

Q. WAP to input string and print it

```
void main()
{
  char str[20];
  printf("Enter string");
  gets(str);
  puts(str);

  getch();
}
```

Q. WAP to input string and print its length.

```
void main()
{
  char str[30];
  int i=0;
  printf("Enter string");
  gets(str);
  while(str[i]!='\0')
  { i++;
  }
  printf("%d", i);
  getch();
}
```

```
a=strlen(str);
```

Q. WAP to input a string and copy the content of string to another string.

```
void main()
{
    char str[20], str1[20];
    int i = 0;
    printf("Enter string");
    gets(str);
    while(str[i] != '\0')
    {
        str1[i] = str[i];
        i++;
    } str1[i] = '\0';
    puts(str1);
    getch();
}
```

strcpy(str1, str)

Q. WAP to input a string and concatinate the strings into third string.

```
void main()
{
    char str[20], str1[20], str2[40];
    int i = 0, j = 0
    printf("Enter 2 strings");
    gets(str);
    gets(str1);
    while(str[i] != '\0').
    {   str2[i] = str[i];
        i++;
    }
```

strcat(str2, str);

```
while(str1[j]!='\0')
{
  str2[i] = str1[j];
  j++;
  i++;
} str2[i] = '\0';
puts(str2);
getch();
}
```

```
strcat(str2, str1);
```

Q. WAP to input two strings and compare them whether they are same are not.

```
void main()
{
  char str[30], str1[30];
  int a, b, flag = 0
  gets(str);
  gets(str1);
  a = strlen(str);
  b = strlen(str1);
  if(a==b)
  {
    for(i=0; str[i]!='\0'; i++)
    {
      if(str[i] != str1[i])
      { flag = 1;
        break;
      }
    }
  }
```

```
if(strlen(str) == strlen(str1))
if(strcmp(str1,str
  == 0)
{
}
```

```
    if (flag == 0)
    {   printf ("Equal");
    }   else printf ("unequal");
    }
  else {
  printf ("Unequal");
  }
 }
 getch();
}
```

Q. WAP a program two strings, concatinate them into first string.

```
void main()
{
  char str[40], str1[20];
  int i, a;
  gets(str);
  gets(str1);
   a = strlen(str);
  for(i=0; str1[i] != '\0'; i++)
  {
    str[a+i] = str1[i];
  }
  str[a+i] = '\0';
  puts(str);
  getch();
}
```

Q. WAP to input a string and convert all lower case character to upper case

```
void main()
{
  char str[20];
  int i;
  gets(str);
  for(i=0; str[i]!='\0'; i++)
  {
    if(str[i]>=97 && str[i]<=122)
    {
      str[i] = str[i] - 32;
    }
  }
  puts(str);
  getch();
}
```

str[i] -= 32;

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

Q. WAP to input a string store it and print it in reverse order.

```
void main()
{
  char str[20], temp;
  int i; temp
  gets(str);
  for(i=0; i<strlen(str)/2; i++)
  {
                = g
```

```
    temp = str[i];
str[i] = str[strlen(str)-1-i];
                = 9
str[strlen(str)+i] = temp;
        = 9
  }
  puts(str);
  getch();
}
```

strrev(str)

Q. WAP to input a string and count how many of them vowels.

```
void main()
{
  char str[20];
  int i, c=0;
  gets(str);
  for(i=0; str[i]!='\0'; i++)
  {
    if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'
    ||str[i]=='u'||str[i]=='A'||str[i]=='E'||
    str[i]=='I'||str[i]=='O'||str[i]=='U')
    {
      c++;
    }
  printf("%d",c);
  getch();
}
```

Q. WAP to input a string and check whether its a pallandrome or not

```
void main()
{
  char str[30]; temp
  int i, l, flag = 0
  gets(str);
  l = strlen(str);
  for(i=0; i<l/2; i++)
  {
  if(str[i] != str[l-i-1])
    flag = 1;
    break;
  }
  if (flag == 0)
        printf("Pallindrome");
  else
        printf("Not Pallindrome");
}
```

Q. WAP to input a string an count how many words are there in that string.

```
void main()
{
  char str[30]
  int i, c=1;
  gets(str);
  for(i=0; str[i] != '\0'; i++)
  { if(str[i] == ' ' && str[i+1] != ' ')
```

```
        c++;
    }
    printf("%d", c);
}
```

```
if(str[0] != ' ')
    c = 0;
else
    c = 1;
for(str[i] == ' ' &&
    str[i+1] != ' ');
```

Q. WAP to input name and print its initials.

```
void main()
{
    char str[30];
    int i, c;
    printf("Enter string");
    gets(str);
    if(str[0] != '\0')
        printf("%c", str[0]);
    for(i=0; str[i] != '\0'; i++)
    {
        if(str[i] == ' ' && str[i+1] != ' ')
            printf("%c", str[i+1]);
    }
}
```

strlwr(str)
strupr(str)

Q. WAP to input string and count how many are consonants

```
void main()
{
char str[20],
int i, c=0;
gets(str);
strlwr(str);
for(i=0; str[i]!='\0'; i++)
{
str[i] = tolower(str[i]);
if(str[i]!='a' || str[i]!='e' || str[i]!='o' || str[i]!='i'
str[i]!='u')
c++;
}
printf("%d", c);
getch()
}
{
if(str[i]>=97 && str[i]<=122)
{
if(str[i]!='a' || str[i]!='e' || str[i]!='i' || str[i]!=
str[i]='u')
c++;
}
}
printf("%d", c);
getch();
}
```