

# Strings

# String

Hello world

H	e	l	l	o		w	o	r	l	d	\0
0	1	2	3	4	5	6	7	8	9	10	11

```
char s[12] = {'H', 'e', 'l', 'l', 'o',  
              ' ', 'w', 'o', 'r', 'l',  
              'd', '\0'}
```

# String

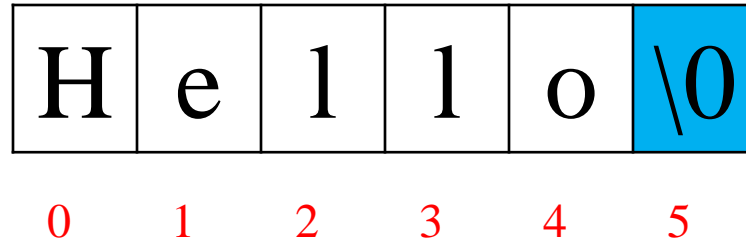
Hello world

H	e	l	l	o		w	o	r	l	d	\0
0	1	2	3	4	5	6	7	8	9	10	11

```
char s[12] = "Hello world"
```

# String

```
char s[] = "Hello"
```



# String

```
char s[10] = "Hello"
```

H	e	l	l	o	\0	\0	\0	\0	\0
0	1	2	3	4	5	6	7	8	9

# String

```
char s[] = "Hello"
```

s[4]

H	e	l	l	o	\0
0	1	2	3	4	5

# String

```
char s[] = "Hello"
```

```
s[4] = 'o'
```

H	e	l	l	o	\0
0	1	2	3	4	5

# String

```
char s[] = "Hello"
```

s[5]

H	e	l	l	o	\0
---	---	---	---	---	----

0 1 2 3 4 5



# String

```
char s[] = "Hello"
```

```
s[5] = ' , '
```

H	e	l	l	o	\0
---	---	---	---	---	----

0

1

2

3

4

5

# Printing String

```
S = "hello World";
```

```
printf("%s\n", s);
```

```
puts(s);
```

# Scanning String

```
char s[10];  
scanf("%s", &s);  
puts(s)
```

Terminal Hello World
-------------------------

# Scanning String

```
char s[10];  
scanf("%s", &s);  
puts(s)
```

Terminal  
Hello World  
Hello

it stops reading  
when it encounters a  
space, tab, or  
newline character.

# Scanning String

```
char s[10];  
gets(s);  
puts(s)
```

```
Terminal  
Hello World  
Hello World
```

Stops reading when it encounters  
either a newline character or the  
end of file.

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D				
1					
2					
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1					
2					
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o	\0		
1					
2					
3					
4					
5					
6					
7					



# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1	i				
2					
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1	i	t			
2					
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1	i	t	\0		
2					
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1	i	t			
2	j				
3					
4					
5					
6					
7					

# Separate words

0	1	2	3	4	5	6	7	8	9	10	11	12	13
D	o		i	t		j	u	s	t		d	o	\0

	0	1	2	3	4
0	D	o			
1	i	t			
2	j	u	s	t	
3	d	o			
4					
5					
6					
7					