

A to Z \rightarrow 65 to 90 (-32) } $97 - 65 = 32$
 a to z \rightarrow 97 to 122 (+32)

string = classA \leftarrow Convert to uppercase

str

0	1	2	3	4	5	6
C	l	a	s	s	A	\0

char str[10];

int i = 0;

while (str[i] != '\0')

{

if (str[i] >='a' && str[i] <='z')

{

str[i] = str[i] - 32; } i = i + 1;

}

\rightarrow str[i] = '\0';

printf("%s", str);

puts(str);

1st :- while (str[i] != '\0') str[0] = '\0'
 { C = '\0'

if (

i = 0 + 1 = i = 1;

2nd :- while (str[i] != '\0') d = '\0'

{

if (true)

str[i] = 108 - 32 = 76

1 = 76 \rightarrow L

i = 1 + 1 = 2

3rd :- while (str[i] != '\0') a = '\0'

{

if (true)

$$\text{str}[i] = 97 - 32 = 65$$

$$2 = 65 = A$$

4th:- while (str[i] != '\0') s != '\0'

```

{
    if (true)
    {
        str[i] = 115 - 32 = 83
        3 = 83 - 5
    }
    i = i + 1;    i = 4

```

5th:- while (str[i] != '\0') s != '\0'

```

{
    if (true)
    {
        str[i] = 115 - 32 = 83
        4 = 83 - 5
    }
    i = i + 1 = 5

```

5th:- while (str[i] != '\0') = A != '\0'

```

{
    if (false)
    }

```

CLASS A

puts (str) = CLASS A

Append String

1st string = DS

2nd string = classA

output = DSclassA

```
char str[10], Append[10];
```

```
int i = 0, j = 0;
```

```
printf("Enter First string");
```

```
gets(str); / scanf("%s", str);
```

```
printf("Enter Second string");
```

```
gets(Append);
```

```
while (str[i] != '\0')  
{
```

```
    i = i + 1;
```

```
}
```

i = 2

DS \0
↓ ↓ ↓
0 1 2

```
while (Append[j] != '\0')  
{
```

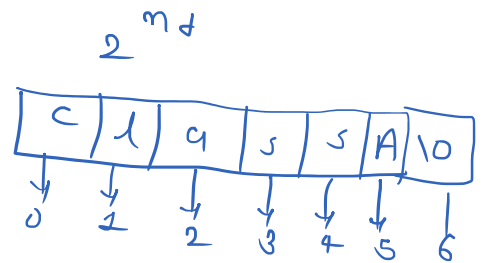
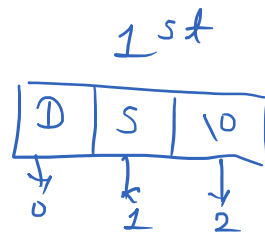
```
    str[i] = Append[j];
```

↑
2nd

```
    i = i + 1;
```

```
    j = j + 1;
```

```
puts(str);
```



$i = 0$, $j = 0$

1st while (str[i] != '\0') = D != '\0' ✓
 {
 $i = i + 1$; $i = 0 + 1$; $i = 1$
 }

2nd while (str[i] != '\0') = S != '\0' ✓
 {
 $i = i + 1$; $i = 1 + 1$; $i = 2$
 }

3rd :- while (str[i] != '\0') '\0' != '\0' ✗

1st = while (Append[j] != '\0') = C != '\0' ✗
 {
 $str[i] = Append[j]$
 $str[2] = Append[0]$
 $str[2] = C$;

D	S	C
---	---	---

 $i = i + 1 = 2 + 1 = 3$
 }

$$j = j + 1 = 0 + 1 = 1$$

2nd = while (Append[j] != '\0') = 1 != '\0'

{
str[i] = Append[j];

str[3] = Append[1];

str[3] = 1;

D	s	c	l
---	---	---	---

i = i + 1; 3 + 1 = 4

j = j + 1; 1 + 1 = 2

}

3rd :- while (Append[j] != '\0') a != '\0'

{
str[i] = Append[j];

str[4] = Append[2];

str[4] = a;

D	s	c	l	a
---	---	---	---	---

i = i + 1 = 4 + 1 = 5

j = j + 1 = 2 + 1 = 3

}

4th = while (Append[j] != '\0') s != '\0' ✓

{
str[5] = Append[3];

str[5] = s

D	s	c	l	a	s
---	---	---	---	---	---

i = i + 1 = 5 + 1 = 6

j = j + 1 = 3 + 1 = 4

}

5th :- while (Append[i] != '\0') = S != '\0' ✓

{
 str[6] = Append[4]

str[6] = S;

D	S	C	L	A	S	S
---	---	---	---	---	---	---

i = i + 1 = 6 + 1 = 7

j = j + 1 = 4 + 1 = 5

}

6th :- while (Append[j] != '\0') = A != '\0' ✓

{
 str[7] = Append[5];

str[7] = A

D	S	C	L	A	S	S	A
---	---	---	---	---	---	---	---

i = i + 1 = 7 + 1 = 8

j = j + 1 = 5 + 1 = 6

}

7th :- while (Append[i] != '\0') = '\0' != '\0' ✗

Put (str);