

C Programming (W12)

Welcome!!
Please check attendance individually.
(Mobile App)



Things to do today

- O1 Notice & Key concept :
- O2 Lecture Notes (Ch.13)
 Structure
- Homework: Codyssey all 10 problems ~ 6/13

 Add timeslot

char s[] = "abc";

Index	Value	Expression	Address Expression
0	'a'	s[0]	&s[0]
1	'b'	s[1]	&s[1]
2	' C '	s[2]	&s[2]
3	'\0'	s[3]	&s[3]

⋄ Values:

$$s[0] \rightarrow 'a'$$
 $s[1] \rightarrow 'b'$ $s[2] \rightarrow 'c'$ $s[3] \rightarrow ' \setminus 0'$ (null terminator)

⋄ Addresses:

⋄ Pointers:

char
$$*p = &s[0]; // or simply: char $*p = s;$$$

- Now: p == s
- You can access the characters via pointer arithmetic:
 - $0 *p \rightarrow 'a'$
 - $(p + 1) \rightarrow b'$
 - $0 *(p + 2) \rightarrow 'c'$



Array & Pointer

```
int a = 10;
  value : a
  address : &a
  pointer : int *p = &a
```

1

```
int a[3] = { 10, 20, 30 };

value : a[0] / a[1] / a[2]

address : &a[0] / &a[1] / &a[2]

pointer : int *p0 == &a[0]

int *p1 == &a[1]

int *p2 == &a[2]

*(p + 0) == 10

*(p + 1) == 20

*(p + 2) == 30
```

p is address AND *p is value at this address

```
char s[] = "abc";
value : s[0] / s[1] / s[2]
```

address: &s[0] / &s[1] / &s[2]

pointer : p == &s[0]



See you next week! DO NOT miss the classes