

# **Tute 07**

**COMP1511 23T1**

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# content

- pointers
- malloc

# assignment 1

- what did we learn
- any tips to yourself or others

# pointers

exercise on tute page

<https://cgi.cse.unsw.edu.au/~cs1511/22T3/tut/07/questions>

- declaration: `type *ptr`
- referencing: `ptr = &variable`
- accessing/deferencing: `*ptr`
- `struct_ptr->field` is equivalent to `(*struct_ptr).field`

the `*` is used both to indicate the type is a pointer and for dereferencing (and multiplication as well!)

# pointers example

- `increment_time.c`
- `increment_time_struct.c`

# malloc and arrays

```
struct pet {  
    int age;  
    int weight;  
    char name[100];  
};  
  
int main(void) {  
  
    int i;  
    double d;  
    int array1[10];  
    char array2[4];  
    struct pet coco;  
    struct pet class_pets[5];  
    return 0;  
}
```

# **command line arguments**