

Struct

4/26, hydai

What is a struct?

What is a struct?

Car



What is a struct?

Car



Engine

What is a struct?

Car



Engine



Wheel

Struct

- 把擁有的東西包起來
- ~~多個願望一次滿足~~
- 好比說我要買車，不會分別買引擎 & 車輪
- 而是選擇直接買一輛車

Another example

```
struct Student {  
    int id;  
    char name[20];  
    int score;  
};
```


- 一個學生 Student
- 學生有學號 id
- 也有名字 name[20]
- 也有成績 score

如何拿到 struct 裡面的東西？

```
1 #include <stdio>
2 #include <string>
3 struct Student {
4     int id;
5     char name[20];
6     int score;
7 };
8
9 int main(int argc, char *argv[])
10 {
11     Student hydai;
12     hydai.id = 1;
13     strcpy(hydai.name, "hydai");
14     hydai.score = 60;
15     printf("Student %s\n", hydai.name);
16     printf("ID = %d\n", hydai.id);
17     printf("Score = %d\n", hydai.score);
18     return 0;
19 }
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struct 宣告出來以後
用法跟 int, char 一樣

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學號，我們會說是
學生的學號
這個“的”換成 C++
就是“.”

所以學生的學號就
是 student.id

練習

- 請宣告一個 Student 的 struct
- 裡頭必須要有幾個元素：
 - id => 學號
 - english => 英文成績
 - math => 數學成績
 - totalscore => 總成績（為英文與數學加總）
- 輸入學號與英文數學成績，請輸出總成績
- 一定要用 struct 練習噢～