



# Week 6 tutorial

- 2d array exercise -> Galaxy exercise
- String



- Assignment 1 is out !
- Start early

<https://cgi.cse.unsw.edu.au/~dp1091/24T3/assignments/ass1/index.html>



## Recap on 2d array

	Col1	Col2	Col3	Col4	....
Row1	Arr[0][0]	Arr[0][1]	Arr[0][2]	Arr[0][3]	
Row2	Arr[1][0]	Arr[1][1]	Arr[1][2]	Arr[1][3]	
Row3	Arr[2][0]	Arr[2][1]	Arr[2][2]	Arr[2][3]	
Row4	Arr[3][0]	Arr[3][1]	Arr[3][2]	Arr[3][3]	
⋮					



## Pass the first element in 1d array and 2d array

```
// pass to the first position into array;  
array[0] = 1;  
array[0][0] = 1;
```



## Printing the first element in 1d array and 2d array

```
// print the first element in array  
printf("%d\n", array[0]);  
printf("%d\n", twodarray[0][0]);
```



## **Part 1: 2D arrays Practice**



## **Part2 : arrays and functions**



# String

'h' 'e' 'l' 'l' 'o' " 'w' 'o' 'r' 'l' 'd' '! '\0'





## Define a string

```
char str[] = {'h', 'e', 'l', 'l', 'o', '\0'};  
char str1[] = "Hello world!";
```



**Practice implement the functions**



## Extra standard libraries

```
#include <string.h>
```

```
#include <ctype.h>
```