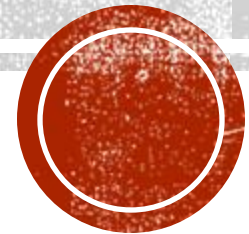# C LANGUAGE

NOTE

Chapter 5 : If-else conditional expressions

@STUDY_DISES

IF-ELSE CONDITIONAL EXPRESSIONS

- If-else conditional expression is very very very important in whole coding world.

- Conditional expressions will be used if you need to judge a thing or a condition and then it will have lots of result depending on the result of judging.

- In C language, we have two different kinds of conditional expressions , one is our topic today , the other one will introduce in next chapter called "switch-case".

- In C , if-else expression will be used like (see next page).

IF-ELSE CONDITIONAL EXPRESSIONS

```
if ( the conditions )
    {
        ...
        program
        ...
    }
else if ( others condition )
    {

    }
else
    {

    }
```

EXPLAINING

- By the structure we see in last page, when we use the if-else conditional expressions, we need a if (condition) then we use a pair of {} to cover the program which should be run when the condition is satified.

- In fact , the else if function and the else function are not necessary for if-else conditional expressions. They will be used if you need them.

BOOLEAN ALGEBRA AND COMPARE SYMBOL

- When we use the conditional expresstion, we usually use the compare symbol lile < , > …etc. Then we sometimes will use the boolean algebra for supporting.

>	A > B , means when A **bigger** than B	if (A > B)
<	A < B , means when A **smaller** than B	if (A < B)
>=	A >= B , means A **bigger than or equal** to B	if (A >= B)
<=	A <= B , means A **smaller than or equal** to B	if (A <= B)
==	A == B , means A **equal to** B	if (A == B)
&&	*A_condtion* && *B_condition* A **and** B condition are all satisfied.	if ((A) && (B))
||	*A_condtion* || *B_condition* A **or** B condition are satisfied	if ((A) || (B))
!	*!A_condition* A condition are **not** satified.	if (!(A))

SAMPLE PRACTICE

- Practice 5_1 :
  - Zerojudge a003 :
  - Link : https://zerojudge.tw/ShowProblem?problemid=a003
    Please write a program and it will input two variable M and D.
    - By the formula calculate S = (M*2+D)%3
    - When S = 0 , output "普通".
    - When S = 1 , output "吉".
    - When S = 2 , output "大吉".

ANSWER FOR SAMPLE PRACTICE

```c
#include <stdio.h>

int main ()
{
    int M , D ;
    scanf( "%d%d" , &M , &D ) ;
    int S = ( M*2+D ) % 3 ;
    if ( S == 0 )
        printf( "普通\n" ) ;
    else if ( S == 1 )
        printf( "吉\n" ) ;
    else
        printf( "大吉\n" ) ;
    return 0 ;
}
```
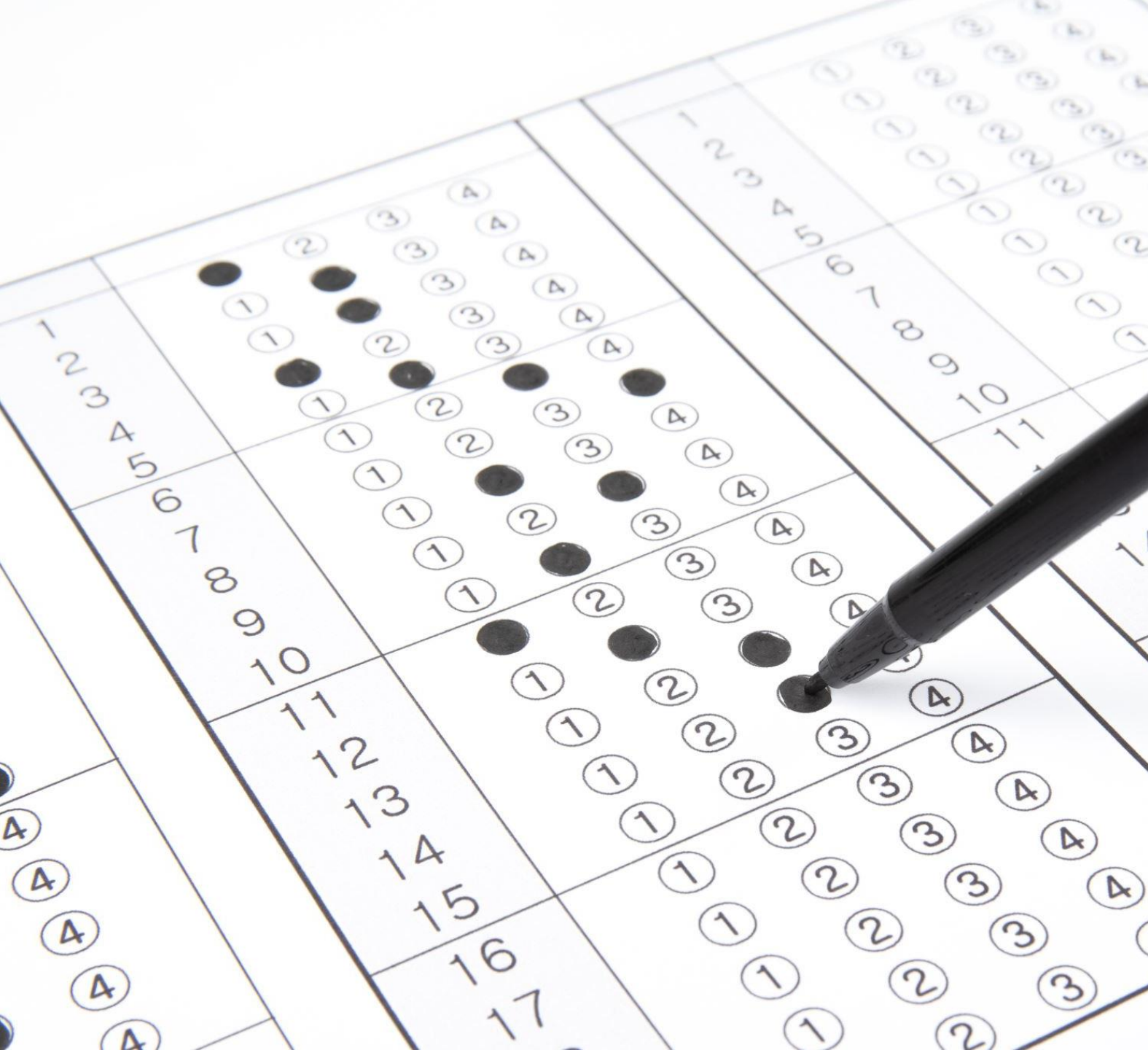
ADVANCED PRACTICE

- Advanced Practice 5 :
  - Zerojudge c461:
  APCS (2017/10/18-1) Logic Operators
  - Link : https://zerojudge.tw/ShowProblem?problemid=c461

IF YOU WANT FULL OF THIS NOTE AND THE ANSWER OF ADVANCED PRACTICE

- Please follow this IG @study_dises.

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