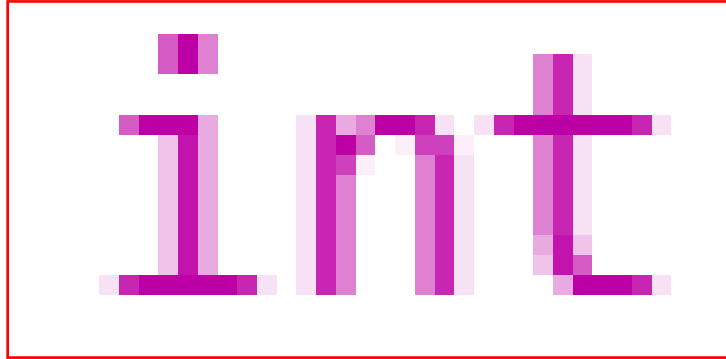


# 程式設計（一）

9/26 福山友美加 Maya

①



① **date type**

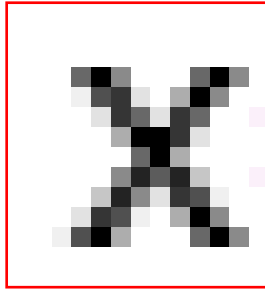
integer 0,1,2,3...  
-1,-2,-3...

Rule → before using a variable  
must define its data type.

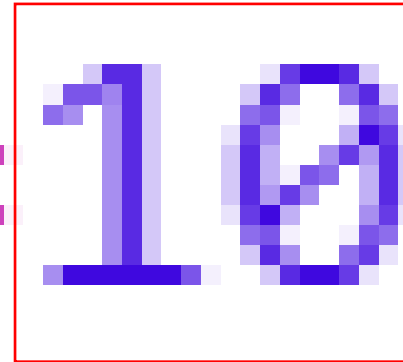
②

A: name of the  
variable  
B: in the view of  
hard-ware.  
It's a memory  
location with space  
to restore data.

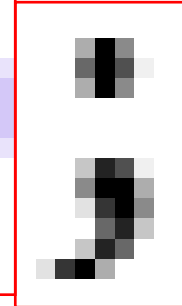
②



③



④



④

Semicolon  
A terminator of a statement

③

A: This sign will assign  
the data in the right side  
to the last variable's  
space  
B: this operation is called  
'assignment'  
It's an execution  
symbol (or sign)

```
int main() {  
    int x=10;  
    int y=25;  
    int z=x+y;  
    printf("Sum of x+y = %i", z);  
}
```

{ } braces 大括號  
↑

Statements: composed of descriptions, logic, loop etc.

Google to find out  
C language braces: used to signify the start and end of a series of statements

# Parentheses, Brackets, & Braces

## ( ) Parentheses

A: in the end of function name.  
there is a parentheses

B: it is used to indicate a function

Google to find out

C language parentheses:

used to surround input parameters  
of a function call.

## [ ] Brackets

Use to indicate an array  
which is a data structure in C

## { } Braces 大括號



Statements: composed of  
descriptions, logic, loop etc.

Google to find out

C language braces: used to  
signify the start and end of a  
series of statements

Date type of variable

A: before using a variable we must declare its data type

B: the reason for example, our integer and character are,  
same to the machines

ANSI A.N.S.I

American national standard Institute

Program → ASCII → Compiler → Machine code

≠  
Chinese  
Japanese

```
1  #include <stdio.h>
2  int main()
3  {
4      // Data type
5      int var = 65;
6      |
7      printf("%c", var);
8      return 0;
9  }
```

Execute → compile → execute → run

```
A
-----
Process exited after 0.5722 seconds with return value 0
Press any key to continue . . . |
```

```
1  #include <stdio.h>
2  int main()
3  {
4      // Data type
5      int var = 97;
6
7      printf("%c", var);
8      return 0;
9  }
10
```

Execute → compile → execute → run


```
a
-----
Process exited after 0.4468 seconds with return value 0
Press any key to continue . . . |
```

*printf (control string, arg1,arg2,...);*

A is the control statement control format for presentation  
B,C ... are arguments, no control

```
#include <stdio.h>
int main()
{
    // Data type
    int b= 66, c=66;

    printf("the same value 66 of b and c shows different presentation b=%b and c=%c", b, c);
    return 0;
}
```



```
the same value 66 of b and c shows different presentation b=b and c=B
-----
Process exited after 1.507 seconds with return value 0
Press any key to continue . . . |
```