



	User			Group			Everyone			
d	r	w	x	r	w	x	r	w	x	
0	1	1	1	1	1	1	1	0	1	say hello sibi
	1	1	1	0	0	0	0	0	0	
	1	1	1	0	0	1	0	0	0	
	1	1	1	1	0	1	0	0	0	

$$\begin{array}{rcl}
 1 & 0 & 1 \\
 2^2 & 2^1 & 2^0 \\
 \hline
 & & 2^0 \rightarrow 1 \\
 & & 2^1 \rightarrow + 0 \\
 & & 2^2 \rightarrow + 4 \\
 \hline
 & & 5
 \end{array}$$

Pseudocode :

If (condition)
 set of tasks;
else
 set of tasks;

1) function calls
2) statements
3) Expressions
4) Assignments
5) More control structures

-
- It can't be compiled
 - Syntax don't matter
 - Meaning matters (humane)

Loops:

while \rightarrow for:

while (condition) {

}

1 byte = 8 bits

$$2^3 = 8 \text{ (0-7)}$$

$$2^4 = 16 \text{ (0-15)}$$

$$2^8 = 256 \text{ (0-255)}$$

$$2^{16} = 65536 \text{ (0-65535)}$$

$$2^{32}$$

Fundamentals -

Variable : It is a place that can hold data.

```
int i;
```

```
int i;    (2 bytes = 16 bits)
```

A

S

Types of Variables:

Built-In

- 1) Integer (int)
- 2) Character (char)
- 3) Float (float)
- 4) Double (double)
- 5) String (char [])

- 1) Built-in Data Types
- 2) Derived Data Types.

$$f(x, y) = x^2 + y^2$$

$$x = 2$$

$$y = 3$$

what is $f(2, 3)$

Format Specifiers :

%s	-	String
%d	-	Integer
%ld	-	long,
%f	-	float ; %lf - double
%u	-	long ;
%c	-	Character

To compile:

```
$ gcc -o <output_file> <input_file>
```

```
$ gcc -o types types.c
```

To execute:

```
$ ./types
```