

# How to master coding

27 Aug 2025

## Important Aspects

- 1> Learn the basics.
- 2> practise everyday, incrementally work on harder problems
- 3> debug
- 4> Run, make planned mistakes, compile and debug
- 5> Do mini fun projects
- 6> Learn from others/Github
- 7> Logic building

## problem logic

\* Note / Read one item at a time.

Ex! Check the color - Green

pseudocode → Iterate over colors list/Array.

→ check if item is green  
element

if

→ otherwise

continue to next  
element

Examples: i> Find no. of colors

ii> swap numbers

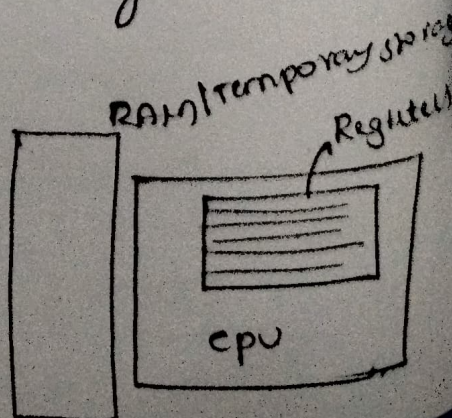
iii> Increasing sequence/decreasing

iv> min, max, Average.

## Variable and Data types

Variables: used to store values

\* If variables are not essential, then we need to use address location





why variables?

i> simplicity

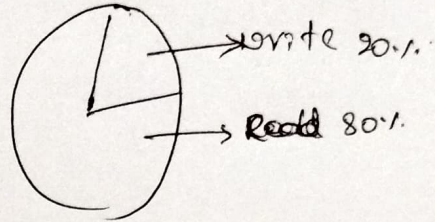
ii> make code readable.

iii> Flexibility, Dynamic memory Allocation.

Rules for declaring variables

\* keywords (int, for) are not allowed.

\* library names \$lib are not allowed



datatype

\* Data + type.

\* Data type (integer) = variable (name)

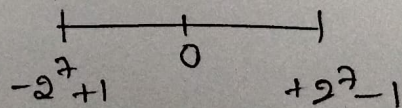
why datatype

\* Efficient use of RAM

\* type checking

\* type casting

char  $\rightarrow$   
unsigned char  $\rightarrow$



Eg: string name = "Algorithm365"

int age = 25

float height = 5.9f

boolean isActive = "True";