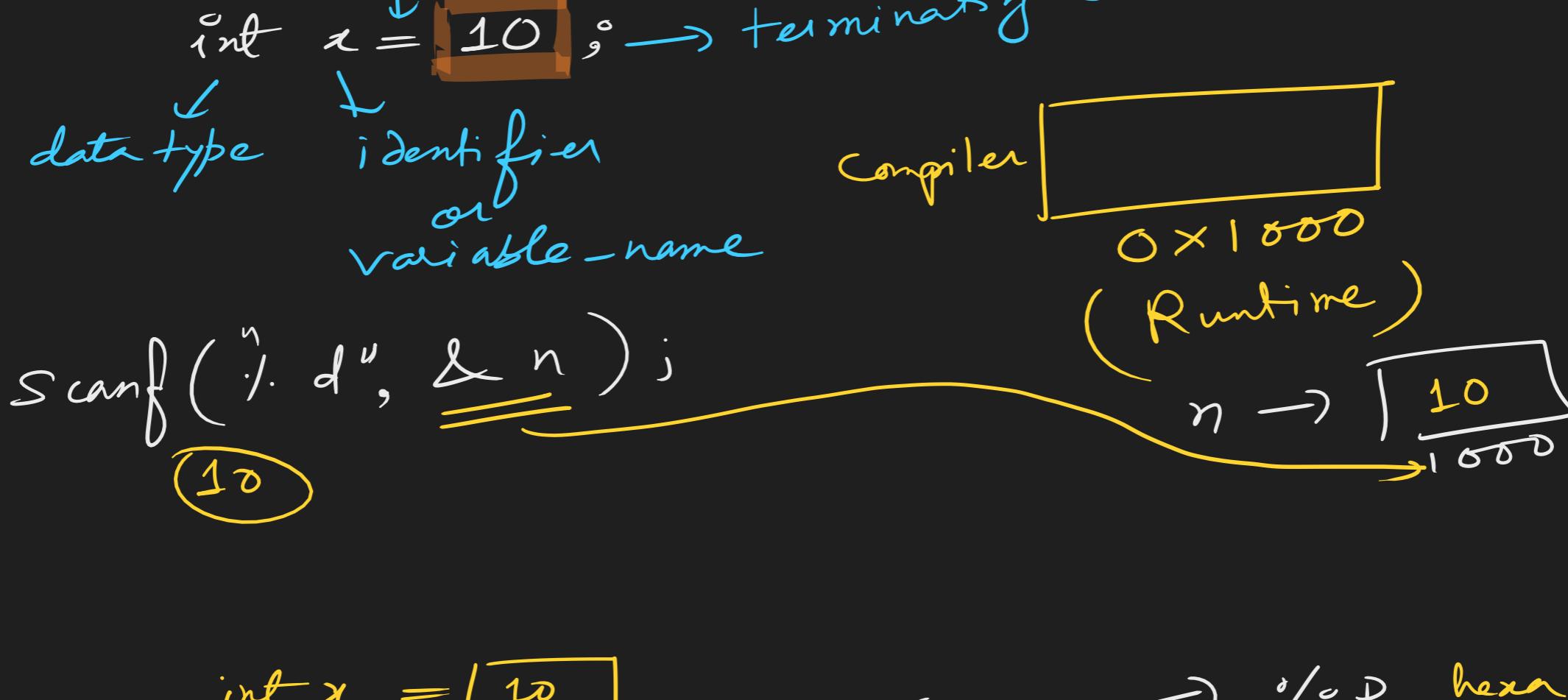


- \* Loops
- \* Conditional Statements
- \* break & continue
- \* functions
- \* Recursion
- \* Operators + data types + variables
- \* Pointers
- \* Arrays

\* Variable → It is a container → allocated by the compiler (CPU).

It is a memory location where we can store data.



$\text{int } x = \boxed{10};$  →  $(\&x)$  → %p base  
→ %x base

\* A pointer is a variable which stores the address of another variable.

$\text{int } * \text{ptr} = \boxed{\&x};$  [reference to x]

Syntax: →  $\text{int } * \text{ptr}$  { →  $\text{int } \text{ptr}$  } →  $\text{int } * \text{ptr}$  { All mean the same. }

$\text{int } \underline{x} = \boxed{10};$   $\&x;$  [address = pointer]

$\text{int } * \text{ptr} = \boxed{\&x;} = \boxed{0x200}$  address of x  
also available  $(0x400)$   $[\ast \text{ptr} = 10]$

{ Address of ptr =  $\boxed{\&\text{ptr}};$  }

Double pointer → Pointer to another pointer

$\text{int } ** \text{dptr} = \boxed{\&\text{ptr}}; = \boxed{0x400}$   $[\ast \text{dptr} = 10]$

Storage classes: → scope

- ① static → global ✓
- ② extern → global ✓
- ③ auto → local ✓
- ④ register → RAM ✓

lifetime

file

multiple files inside

same folder

(CPU) \* pointers are not allowed



Folder : knishaal