

30-Day C Language Learning Plan

Day 16: Pointers - Basics

1. Pointer to int
2. Pointer arithmetic

```
int * pX = &x;
```

(integer pointer named pX
is set to the address
of x)

```
int y = *pX;
```

Notes:

(integer named y is set to the
thing pointed to by pX)

POINTER:- a variable that stores the memory
address of another variable.

POINTER OPERATORS:-

* → dereference operator
(value at address)

Ex:-

*p = value at
pointer

& → address of operator

Ex:-

&x = address
of x

POINTER TYPES:-

```
int *p; // pointer to int
```

```
char *c; // pointer to char
```

```
float *f; // pointer to float
```

POINTER ARITHMETIC:-

↳ ptr + i : move forward i elements

↳ ptr - i : move backward

↳ ptr1 - ptr2 : gives distance between
pointers (in elements)

NULL POINTERS:-

```
int *p = (NULL); → points to nothing
```