**Pointer in C**

When a variable is defined, compiler allocates some bytes to it. The value of the variable is stored in that some memory location

Int x;

X = 4;

Y = x; now when the value of variable is used, the contents in the memory are used

&x – reference to the variable, the memory location is used

Declare a pointer variable type \*pointername

Pointers are addresses

All addreses on an OS are of same size (bytes)

Compiler checks the type of pointer you are sing. It will issue a warning if we mix the type of pointers in expressions

Int \*p1; //p1 is variable that holds an address which points to a memory location which is just large enough to hold an integer

Char \*p2; //pointer (1 byte)

Unsigned int \*p3;

P1 = &x; // stores the address of variable x in p1

ALWAYS initialize pointers before using them

**Malloc**

Malloc and go and reserve memory for you

Malloc + structures – pointers to structure