[22:12, 9/4/2023] Debanjan Sir Nit: The void pointer in C is a pointer which is not associated with any data types. It points to some data location in the storage means points to the address of variables. It is also called general purpose pointer. In C, malloc() and calloc() functions return void \* or generic pointers.

It has some limitations −

1) Pointer arithmetic is not possible with void pointer due to its concrete size.

2) It can’t be used as dereferenced.

[22:12, 9/4/2023] Debanjan Sir Nit: In 32 bit system size of void pointer is 4byte

[22:12, 9/4/2023] Debanjan Sir Nit: null pointer is a pointer which points nothing.

Some uses of the null pointer are:

a) To initialize a pointer variable when that pointer variable isn’t assigned any valid memory address yet.

b) To pass a null pointer to a function argument when we don’t want to pass any valid memory address.

c) To check for null pointer before accessing any pointer variable. So that, we can perform error handling in pointer related code e.g. dereference pointer variable only if it’s not NULL.

[22:12, 9/4/2023] Debanjan Sir Nit: Dangling pointer occurs at the time of the object destruction when the object is deleted or de-allocated from memory without modifying the value of the pointer. In this case, the pointer is pointing to the memory, which is de-allocated.