**Variable declaration , definition and scope**

* Const – declare constant variable, whose value initialized cannot be changed .
* Extern – used to globally initialized variable whose value can be altered within the functions.
* Static – means preserving their value even if they are out of scope.
* Void- is an empty data type and can be type casted to any data type.
* Typedef – is used to give a new name to already existing or custom data type.

typedef long long int LL;

it is used to give new name to long long int

the new name is LL

* In c language variable are always statically scoped.
* If we declare a variable as constant(say num) and try to change its value

Error- assignment of read only variable num.

* Enum- it is a user defined datatype and is mainly used to assign integral constant .
* Constexpr – it is used to declare variable as a guaranteed constant else throw an error-

The value is not usable in constant expression.

* Macros are also used to define a variable contant

Examale- #define var 5

But we can use undef to change its constant value.

* scope is a property handled by compiler, whereas linkage is a property handled by linker.
* Two types of linkage

1.Internal linkage – static keyword is used

2.External linkage extern keyword is used , global variable.