What are storage classes? Mention different types of storage classes. Explain

The number of information in a programme is referred to as a storage class. The term "scope of data" refers to the area of the programme (including subprograms and the function "mian()") and the duration of the variable. in other words, how long the variable keeps its value.

Any one of the ensuing storage classes must be the storage class of a variable.

1. Automatic storage class

2. External storage class

3. Register storage class

4. Static storage class

Automatic storage class

Local variable declaration and automatic storage class are comparable.

The statement is preceded by the word auto.

For example, automatic variables are local variables (auto int x,y,z).

The variables are kept in memory (RAM); the word "auto" is implicit (i.e., the variable is automatic even if it is not used); and the initial value is "junk"

External storage class

Global variables and external storage classes are comparable.

The statement is preceded by the term extern.

Ex: Extern int m, n; • Global variable scope • Memory variables • Explicit (must use keyword) declaration required • Initial value stored is trash

Register storage class

When data in CPU registers is required, the register storage class is employed.

The declaration must come before the key word register.

Ex: register int x, y; • Local variable scope

The variables are kept in registers, need explicit declaration, and have an unknown initial value.

Static storage class

Function blocks make advantage of static storage classes. When the function is first called, the static variable can be initialised exactly once. The most recent value is stored in the static variable for subsequent calls to the same function.

The variable declaration is preceded by the word static.

Example: static int x, y, and z; • Local scope

The variables are kept in memory, need explicit declaration, and have a default initial value of 0.