## class & Objects

- · Class is an extension of structure in 'C'.
- · But, a struct date type can not be treated like a built in date type

C3 = CT + c2 [is not possible]

Illegel. [if all are & show data tome]

- · class provide facility to hide data [ Private, Protected]
- · Class can be inhabit
- · A class strictus can have both variable & function at it member.
- · Structue name [(1955 name] can be used as another data type.

~[C19.55: A c1985 is a way to bind the dark

Specifichion: - class class name [

visibility of private vesmiched member is resmiched

Private: Variable declaration; Fuetion declaration;

Public '.

January declaration;

fretion declaration;

January mination

## erectiny objects :-

[ class-name Any-Name;

## Accessing ( lan member : -

Object-Name. Fretin nom (actual-arguments)

XXX

#### Defining Member Function

A member fuelin of a class is a fueling that how its definition a its prototype within the class definition like any other variable.

member fuetion can be define within the class definition of seperately using (::) Scope resolution

ergi

elay item d
int a;
int b;

Public:

void getDala(int a, ind)

thist a = a;

thust b = b;

cort ( a c c ende.

class item ;

int s;

Public

void getdole (int; int);

declaration

};

int item .: getdale (inta, int b)

9=9

5= 6%

9

- Delany member fuction outside is as simple as declay a normal fuction in c ++ you just need to use Scope resolute with par class, no ne.
- · We can make member fretin Enline
- · Ineide (1915, · (dot) Operator is not required to call a faction. [ Nes called Nested Knetis]
- · A member fretim can be declared private.

  but its visibility will be limited to class only.
- · The Array Can be used as member variable in

class amy int a [size]

. 11 2+ is allowed

Public;

void sitvale (void);

# " Memory Allocation for Objects?

when object of class is created, memory allocated at steek , but if some member have are pointer member [int \*q = new int] then their memory will be placed at heal?

#### Static Dala member!

- · Entiable with zerol only one copy i's cruted)
- · Visibility is limited to class but lifetime is entire program

Static member are known as class-variable became they are associated with entire classification than with any class white

### Static member fretion

member.

· Steelic member for can be called - [cless-name : fuetion-name

class items

int code;

Static int cout;

Public:

void setCode (int a) 1

coode = 9;

Steelic void Set (aut (in)) {

cout ++; /1 cout is static so V

codett; 11 code is not staticX

· Object of a <u>Class</u> behave like any other date type 80, Genesally all activity & a date type is 8 upported by object.

## Friend Fuetim

Private member one not accessible courside the Chers

- . It is not in the scope of the class for which it is declared
- · It can't be called using object. but can be called olivety.
- rathe it need Objetiname. member.
  - in private one.

class sample &

int a;

int b;

delow Posero:

void suppled a = 5; b = 10%;

friend fload mean (sample s);

odd rocks)

T;

Profix Rehm typ fir Nam Parameter

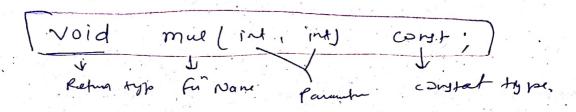
Fload mean (Sauper S) V
return Clad (S.9 + S.6) /2.0;

sample X /1 Object X

X. setvale // caling a Normal fuch
mean(X) (1 caling a fried fuction

# Const member fruition !-

the class turn we may declare it const.



#### Pointer to member

Privale:

int m;

Public;

Void show()

Pointer to
menton & A' class.

Class

[ip is created 4 it act like class member]

the (a. \* ip) - Access the member on.