DAY-3

structure :- Class concept
function
storage :- auto, static, extern & register

→ We can make own header file

```
# includestdio.h >
# include <conio.h >
# include "abc.h"
```
→ own header file jo phle hi bna leni chahiye.

★ structure

```
# Struct tagname
    {
    char nam [30];
     int age;
  };

void main ( )
 {
 clrscr ( );
 struct teeran t = { "Ram Kumar", 25 }, t1;
                   printf (" %s \t %d ", t.name,
                                        t.age);
getch ( );

#    printf ("enter values for object t1 ");
     scanf ("%s %d", t1.name, t.age);

     printf ("%s \t %d", t.name, t.age);
```

sptr =&t

```
#  struct Teekam
   {
   char name [30];
   int age;
   };
  void main ()
   {
   struct Teekam t ={"india", 74};
   Struct Teekam *sptr =&t
  clrscr();
                        pointer to structure
  printf ("%s \t %d\n", t.name, t.age);
  prinf ("%s \t %d\n",(*sptr).name,(*sptr).age);
  printf("%s \t %d", sptr→name, sptr→age);
   getch();
   }
  O/P  teekam  74
         "      "
         "      "
```

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```
☆ Class Teekam
   {
              // empty class
   };

 void main()
  {
   Clrscr(); → TeeRam t ;cout << size of(t) <<endl
   cout << Size of (Teekam);
   getch();
    }
   OP   1  1
```

When empty class is define & we print out O/P the ans is non zero value i.e 1

```
# class
   {
    public;
    int x;
   } ~~tt~~ t1 = {5};
   void main()
   {
    Clrscr();
   cout << ~~t. Team~~ t1. x << endl;
   get ();
    }
           O/P = 5
```

Static belong to class
non static " object

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```
# class    // member (it does not allocate
  {                                   memory
variable   // data member → properties
+
fun^n      // member fu^n → behaviour
}
```

visibility modes : only from
private : // by default, access, within class
member fun

public :

```
# class Teekam
  {
  public :
static int x;
  };
void main ()
  {
  clrscr ();
  Teekam t = {5} // object creation
t.x=5
cout << t.x ; //object name, (dot operator) member
                                    name public
  getch ();
  }
```

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~~[illegible]~~

```
# void ~~[illegible]~~ main ()
      {
      Static int x;      // default value of static
      }.                          int is 0.
```

Consteuctor : Special member fu^n

has same class name & constuctor name
It doesn't have any return types(explicity
by ~~[illegible]~~implicit

- defaultconstuctor
- copy "
- assignment "

Types

1) default
2)
3)

```
#class T
  {
   public:
   T( )
    {
    cout<<"hello";
    }
  };
  void main ( )
  {
   T t ;(implicit)
   T t1= T ( ); (explicitly)
  }
```

O/P hello hello

```
# class X
   {
   public:
        int x
   };
  int main
  {
    X a= {10};
    X b = a ;     // X b = a; // copy const

       cout << a.x << "   " << b.x;
       return0;
      }.
```

O/P 10 10

```
# class T
  {
  pubic :
  int x  ->        T (T &i)
  };                 { x = i.x
                              }
  void main ()
   {
   T t {5, 6};
    T t1 (t);
    T t2 = t; // copy const
    cout << t.x << t.y << endl;
    cout << t1.x << t1.y << end l.
OR  cout << t2.x << t2 y;
```

```
# class T
    {
    public:
    int x, y;
    T (int a, int b)
    {
      x = a;
    y = b;
   }
   T (T &i) { x = i.x;
               y = i.y; }
 };
void main ()
 {
 clrscr ();
 T t (1, 2);
```

```
T t2 = t ;
cout << t.x << t.y << endl;
cout << t1.x << t1.y << endl;
cout << t2.x << t2.y ;
```