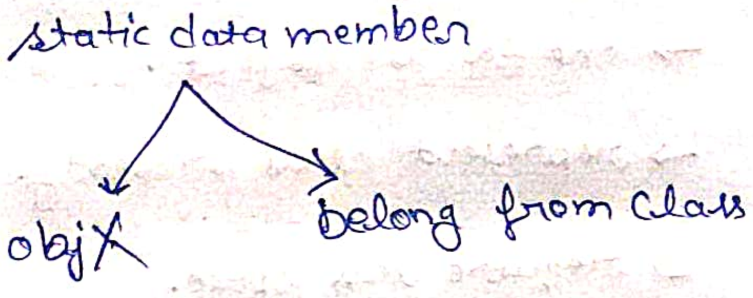
Copy Constructor :-

- → Constructor
- → assign value
- clone → object cloning.

```
public class Student {
        string name;
         int age;
       // Parameterized Constructor.
       public Student (String name, int age)
       {   this.name = name;
            this.age = age;
        }
        // Copy Constructor
        public Student (Student other)
        {
           this.name = other.name;
           this.age = other.age;
         }
        public void showInfo() {
           System.out.println("Name"+name+" Age"+age);
         }
   }
public class Main(){
    public static void main (String[] args){
            Student s1 = new Student ("Alice", 22);
            Student s2 = new Student (s1);
             s1.showInfo();    // Alice, 22
             s2.showInfo();    // Alice, 22
        }
  }
```

Static keyword :-



⇒ static data member is the property of class, not of the object.

Ex:-

```
class Human{
    ~~public Human (int age)~~
      int age;
      int weight;
      static int count =0;

      public Human (int age, int weight)
        {
          count ++ ;
          this.age =age;
          this.weight = weight;
        }
}

public class Main{
      public static void Main (String arg[]) {
          Muman anshu = new Human (24,74);
          Human abc = new Human (24,70);
          System.out.println ("Object Created"+
      }                                Human.count);
}
```

Static Data Members:-

↳ one for all object.

↳ represent class property.

↳ require less space.

Static Method:-

↳ belong to class rather the object.

↳ invoke without creating object.

↳ only change value of static Data member.

Static Method ⟶ static DM (change) Yes

↘ No static DM (change) No

⇒ Why Main Method is static?

↳ memory

→ Called by the JVM without creating an object of the class.

→ main is loaded into memory when the class is loaded.

→ Making ~~static~~ to main() non-static would mean creating an object before calling main(), which is illogical as main() is the first thing to run.

→ Static method like main() are stored in method Area (part of JVM memory structure)

⇒ **this keyword :-**

↳ DM → this.age;

↳ DF → this.sleep();

↳ Constructor → this();

Ex

```
class Human{
    int age;
    int weight;
    public Human(){
        ~~this~~ this.age= ~~age;~~ 0;
                this.weight= 0;
        System.out.println("Constructor Called");
    }
    public Human(int age, int weight)
    { this();
     this.age = age;
     this.weight = weight;
    }
}
```