```java
/****************************************************************************************************/

class Demo{

    int x=10;                                    //non static variable
    static int y=20;                             // static variable


    /****************************Block********************************/

    static{

        System.out.println("In static block-1");         //In static block-1
    }

    {

        System.out.println("In Non Static block-1");      //In Non static block-1

    }

    /****************************Constructor*******************************/

    /*
    static Demo(){

        System.out.println("In static Demo-1");     // Error:modifier static not allowed here

    }

    */

    Demo(){                //internally -> Demo(Demo this)     // No argument constructor & class name Constructor name same

        System.out.println("In Constructor Demo-1");
    }
```

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```java
Demo(int x){                                        //internally  -> Demo(Demo , this , x)

        System.out.println(this.x);
}


Demo(Demo ajay){                                    // internally  -> Demo(Demo , obj1 reference )

        System.out.println("In para");              // In para
        System.out.println(ajay);                   // obj1 reference
        System.out.println(ajay.x);                 //10
}

/****************************Method(static and Non-Static)*********************/

static void fun(){

        System.out.println("Static method fun");        //static method fun
}

void gun(){

        System.out.println("Non static method fun");        // Non static method fun
}



/****************************Main Method****************************************/

public static void main(String [] args){

        Demo obj=new Demo();        // internally -> Demo(obj)

        Demo obj1=new Demo(10);     // internally -> Demo(obj1 , x)

        Demo obj2=new Demo(obj1);   // internally -> Demo(obj1)
```

```
            fun();

            obj.gun();                 // internally ->  gun(obj);
        }
}

/*
 *

    ****************************************Output****************************************

    Output:

        In static block-1
        In Non Static block-1
        In Constructor Demo-1
        In Non Static block-1
        10
        In Non Static block-1
        In para
        Demo@d716361
        10
        Static method fun
        Non static method fun


    ****************************************Sequence****************************************

    Sequence:

        1) static variable
        2) static block
        3) static methods
        4) instance variable
        5) instance block
        6) Constructor
        7) instance methods & static methods -> depend on call function
```