

Static Blocks:

=====

purpose:used to write logics,those logics are executed during .class file loading.

syntax:

```
static
{
//logic here
}
```

java Test

To run above command How many operations will be performed?

Ans:2 Operations will be performed

- 1.JVM Loads .class file byte code in to memory.
- 2.It calls main method to start execution

How many Times .class file is loading?

Ans:only one time .class file is loading

so static blocks executed only once when the class is first loaded.

Ex1:

class Test

```
{

    Test()
    {
        System.out.println("0-arg constructor");
    }
    Test(int a)
    {
        System.out.println("1-arg constructor");
    }
    {
        System.out.println("instance block-1");
    }
    {
        System.out.println("instance block-2");
    }
    static
    {
```

```

        System.out.println("static block-1");
    }
    static
    {
        System.out.println("static block-2");
    }

    public static void main(String... args)
    {
        new Test();
        new Test(10);
    }
}

```

output:

D:\Yellaswamy_ClassNotes\StaticBlocks>javac Test.java

D:\Yellaswamy_ClassNotes\StaticBlocks>java Test

static block-1

static block-2

instance block-1

instance block-2

0-arg constructor

instance block-1

instance block-2

1-arg constructor

Ex:2

class Test

```

{
    static
    {
        System.out.println("static block-1");
    }
    static
    {
        System.out.println("static block-2");
    }

    public static void main(String... args)
    {

```

```
    }  
}
```

output:

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac Test.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>java Test
```

```
static block-1
```

```
static block-2
```

Ex3:

Note:

Upto 1.5 version inside the class with out main() method static blocks are executed.

From 1.6 version onwards inside the class main() method is mandatory.

```
class Test  
{  
    static  
    {  
        System.out.println("static block-1");  
    }  
    static  
    {  
        System.out.println("static block-2");  
    }  
}
```

output:

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac Test.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>java Test
```

```
static block-1
```

```
static block-2
```

Exception in thread "main" java.lang.NoSuchMethodError: main

Ex 4:

//A.java

```
//A.java
class A
{
    static
    {
        System.out.println("Inside class A Static Block");
    }
    public static void main(String... args) throws ClassNotFoundException
    {
        Class.forName("B");
        Class.forName("C");
    }
}
```

//B.java

```
class B
{
    static
    {
        System.out.println("Inside class B Static Block");
    }
}
```

//C.java

```
class C
{
    static
    {
        System.out.println("Inside class C Static Block");
    }
}
```

output:

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac A.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac B.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac C.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>java A
```

```
Inside class A Static Block
```

```
Inside class B Static Block
```

```
Inside class C Static Block
```

```
-----
```

```
//Static blocks are used to initialize static variables during class loading.
```

```
class Test
```

```
{  
    static String name;  
  
    static void display()  
    {  
        System.out.println(Test.name);//null  
    }  
  
    public static void main(String... args)  
    {  
        Test.display();  
    }  
  
}
```

```
output:
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac Test.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>java Test
```

```
null
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>
```

```
-----
```

//Static blocks are used to initialize static variables during class loading.

```
class Test
{
    static String name;

    static
    {
        name="yellaswamy";
    }
    static void display()
    {
        System.out.println(Test.name);//null
    }

    public static void main(String... args)
    {
        Test.display();
    }

}
```

output:

```
D:\Yellaswamy_ClassNotes\StaticBlocks>javac Test.java
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>java Test
yellaswamy
```

```
D:\Yellaswamy_ClassNotes\StaticBlocks>
```