7 Scenarios To Load .class File In JAVA

Using Java Development Tools

```
javac -verbose MyClass.java
java MyClass
javap MyClass.class
javaw MyClass
```

Calling static variables and methods

```java
class Main {
    public static void main(String args[]) {
        System.out.println(Car.maxSpeed);
        Car.suspension();
    }
}

class Car {
    static int maxSpeed = 100;
    static {
        System.out.println("Car static block");
    }

    static void suspension() {
        System.out.println("fixed suspension!");
    }
}
```

Creating an Object

```
class Main {
    public static void main(String args[]) {
      //Unreferenced Object Creation (Anonymous Object)
      new Car();
    }
}

class Car {
    static {
        System.out.println("Car static block");
    }
}
```

Reflection API

```java
public class Main {
    public static void main(String[] args) throws Exception{
        Class<?> cls = Class.forName("Car");
        Object instance = cls.getDeclaredConstructor().newInstance();
        cls.getDeclaredMethod("printDetails").invoke(instance);
    }
}
class Car{
    int maxSpeed = 220;
    String name = "Kia";
    static {System.out.println("Static block in Car class");}
    public void printDetails(){
      System.out.println("The name of the Car is "
      + name + ":: The maxSpeed is " + maxSpeed);}
}
```

ClassName.class

```java
public class Main {
    public static void main(String[] args) throws Exception {
        // Loading the .class file
        Class cls = Car.class
        // Create an object
        Car carInstance = cls.getDeclaredConstructor().newInstance();

        // Print class name
        System.out.println("Loaded class: " + cls.getName());
    }
}
```

Inheritance

```java
public class Main {
    public static void main(String[] args) throws Exception{
        // Compile-time safe!
        Class cls = Car.class
        Object instance = cls.getDeclaredConstructor().newInstance();
        cls.getDeclaredMethod("printDetails").invoke(instance);
    }
}
```

THANK YOU!