**Assume that the following classes have been defined:**

|  |
| --- |
| **class Sue {** |
| **void method1() {** |
| **System.out.println("sue 1");** |
| **}** |
| **void method3() {** |
| **System.out.println("sue 3");** |
| **}** |
| **}** |
| **class Blue {** |
| **void method1() {** |
| **System.out.println("blue 1");** |
| **method3();** |
| **}** |
| **void method3() {** |
| **System.out.println("blue 3");** |
| **}** |
| **}** |
| **class Moo extends Blue {** |
| **void method2() {** |
| **super.method3();** |
| **System.out.println("moo 2");** |
| **this.method3();** |
| **}** |
| **void method3() {** |
| **System.out.println("moo 3");** |
| **}** |
| **}** |
| **class Crew extends Moo {** |
| **void method1() {** |
| **System.out.println("crew 1");** |
| **}** |
| **void method3() {** |
| **System.out.println("crew 3");** |
| **}** |
| **}** |

**And assume that the following variables have been defined:**

**Moo var1 = new Crew();**

**Blue var2 = new Moo();**

**Object var3 = new Sue();**

**Sue var4 = new Sue();**

**Blue var5 = new Crew();**

**Blue var6 = new Blue();**

**In the table below, indicate in the right-hand column the output produced by the statement in the left-hand column. If the statement produces more than one line of output, indicate the line breaks with slashes as in "a/b/c" which indicates three lines of output with "a" followed by "b" followed by "c". If the statement causes an error, fill in the right-hand column with either “CT” for “compile time error" or RE for "runtime error" to indicate when the error would be detected.**

|  |  |  |
| --- | --- | --- |
|  | **Statement** | **Output** |
|  | var1.method1(); |  |
|  | var2.method1(); |  |
|  | var3.method1(); |  |
|  | var4.method1(); |  |
|  | var5.method1(); |  |
|  | var6.method1(); |  |
|  | var1.method3(); |  |
|  | var2.method3(); |  |
|  | var3.method3(); |  |
|  | ((Blue)var1).method1(); |  |
|  | ((Crew)var1).method2(); |  |
|  | ((Sue)var1).method3(); |  |
|  | ((Blue)var3).method1(); |  |
|  | ((Crew)var3).method1(); |  |
|  | ((Sue)var3).method3(); |  |
|  | ((Moo)var2).method2(); |  |
|  | ((Crew)var3).method2(); |  |
|  | ((Moo)var5).method2(); |  |
|  | ((Moo)var6).method2(); |  |
|  | ((Moo)var2).method1(); |  |