Inheritance in JAVA;

1. Single Inheritance
2. Multilevel Inheritance
3. Hierarchical Inheritance
4. multiple inheritance

.Simple inheritance;

```java
package inheritance;
public class iceland {

    void natureA()
    {
        System.out.println("It's Green!...");
    }
}
```

```java
package inheritance;
public class greenland extends iceland {

    void natureB()
    {
        System.out.println(" Ohh !!! It's ice...");
    }

}
```

```java
package inheritance;

public class test {
    public static void main(String[] args) {
```
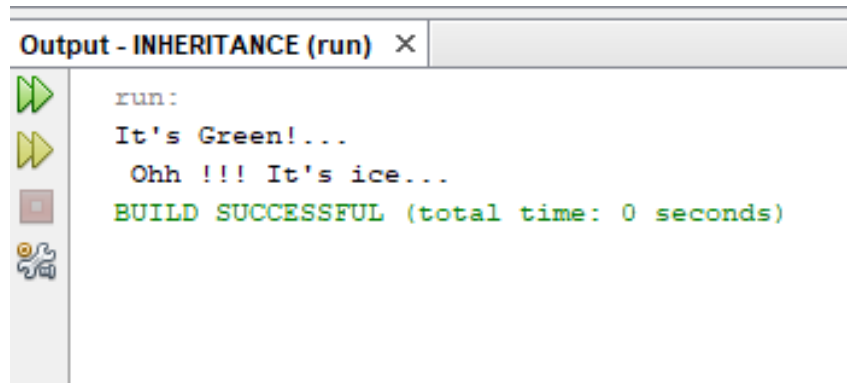
```
        greenland green = new greenland();

        green.natureA();
        green.natureB();
    }

}
```

```
Output - INHERITANCE (run)  X

  run:
  It's Green!...
   Ohh !!! It's ice...
  BUILD SUCCESSFUL (total time: 0 seconds)
```

2. Multilevel Inheritance

```
package inheritance;

public class iceland {

    void natureA()
    {
        System.out.println(" Hlw...It's Green!...");
    }
}
```

```
package inheritance;


public class greenland extends iceland {

    void natureB()
    {
        System.out.println(" Ohh !!! It's Ice...");
    }
```

```
}
```

```java
package inheritance;
public class switzerland extends greenland {

   void natureC()
  {
     System.out.println(" WOW !!! It's Ice and Green...");
  }

}
```
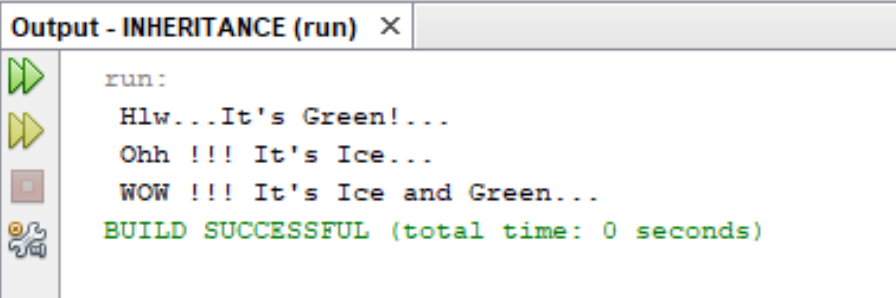
```java
package inheritance;


public class test {
   public static void main(String[] args) {
     switzerland land = new switzerland();

     land.natureA();
     land.natureB();
     land.natureC();
  }

}
```

```
Output - INHERITANCE (run)  X
run:
  Hlw...It's Green!...
  Ohh !!! It's Ice...
  WOW !!! It's Ice and Green...
BUILD SUCCESSFUL (total time: 0 seconds)
```

3. Hierarchical Inheritance

```java
package inheritance;

public class iceland {

    void natureA()
    {
        System.out.println(" Hlw...It's Green!...");
    }
}
```

```java
package inheritance;


public class greenland extends iceland {

    void natureB()
    {
        System.out.println(" Ohh!!! It's Ice...");
    }


}
```

```java
package inheritance;


public class norway extends iceland {

    void natureC()
    {
        System.out.println(" Have an nice tour...");
    }

    void natureB() {
        throw new UnsupportedOperationException("Not supported yet.");
    }

}
```

```
package inheritance;


public class test {

   public static void main(String[] args) {
      norway nature = new norway();

      nature.natureA();
      nature.natureB();
      nature.natureC();
   }

}
```
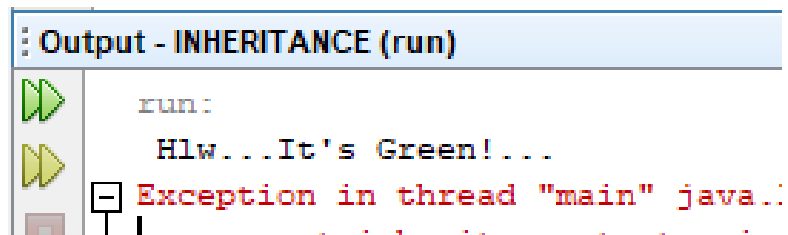
Output - INHERITANCE (run)

```
run:
   Hlw...It's Green!...
Exception in thread "main" java.:
```

4. multiple inheritance:

```
package inheritance;

public class iceland {

   void natureA()
   {
      System.out.println(" Hlw...It's Green!...");
   }
}
```

```
package inheritance;


public class greenland extends iceland {

   void natureB()
   {
      System.out.println(" Ohh !!! It's Ice...");
   }
```

```
}

package inheritance;


public class norway extends iceland,greenland {

    void natureC()
    {
        System.out.println(" Have an nice tour...");
    }

    void natureB() {
        throw new UnsupportedOperationException("Not supported yet.");
    }

}


package inheritance;

public class test {

    public static void main(String[] args) {
        norway nature = new norway();
        nature.natureA();
        nature.natureB();
        nature.natureC();
    }
}
```
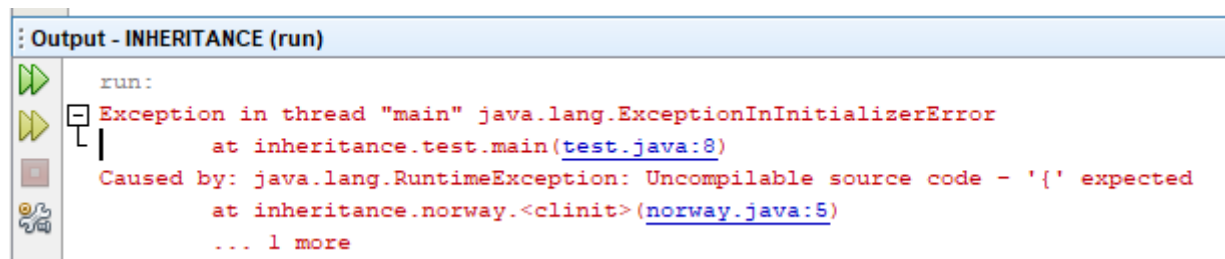
```
Output - INHERITANCE (run)
   run:
   Exception in thread "main" java.lang.ExceptionInInitializerError
           at inheritance.test.main(test.java:8)
   Caused by: java.lang.RuntimeException: Uncompilable source code - '{' expected
           at inheritance.norway.<clinit>(norway.java:5)
           ... 1 more
```

So, JAVA did not support **multiple inheritance…**