

Generics: The motivation for using Java generics is to detect errors at compile time

<pre>package java.lang; public interface Comparable<T> { public int compareTo(T o) } Comparable<Date> c = new Date(); System.out.println(c.compareTo("red"));</pre>	<pre>public static <E> void print(E[] list) { for (int i = 0; i < list.length; i++){ System.out.print(list[i] + " "); } System.out.println(); }</pre>
<pre>public static <E extends GeometricObject> boolean equalArea(E object1, E object2) { return object1.getArea() == object2.getArea(); }</pre>	

File:

<p><u>Write data:</u></p> <pre>public class WriteData { public static void main(String[] args) throws IOException { java.io.File file = new java.io.File("scores.txt"); if (file.exists()) { System.out.println("File already exists"); System.exit(1); } // Create a file java.io.PrintWriter output = new java.io.PrintWriter(file); // Write formatted output to the file output.print("John T Smith "); output.println(90); output.print("Eric K Jones "); output.println(85); // Close the file output.close(); } }</pre>	<pre>public class WriteDataWithAutoClose { public static void main(String[] args) throws Exception { java.io.File file = new java.io.File("scores.txt"); if (file.exists()) { System.out.println("File already exists"); System.exit(0); } try (// Create a file java.io.PrintWriter output = new java.io.PrintWriter(file);) { // Write formatted output to the file output.print("John T Smith "); output.println(90); output.print("Eric K Jones "); output.println(85); } } }</pre>
<p><u>Read Data:</u></p> <pre>import java.util.Scanner; public class ReadData {</pre>	

```
public static void main(String[] args) throws  
Exception {  
    // Create a File instance  
    java.io.File file = new java.io.File("scores.txt");  
  
    // Create a Scanner for the file  
    Scanner input = new Scanner(file);  
  
    // Read data from a file  
    while (input.hasNext()) {  
        String firstName = input.next();  
        String mi = input.next();  
        String lastName = input.next();  
        int score = input.nextInt();  
        System.out.println(  
            firstName + " " + mi + " " + lastName + " " + score);  
    }  
  
    // Close the file  
    input.close();  
}  
}
```

Exception Handling: