

## Input/output streams

### FileWriter: Character file output stream

- `FileWriter writer = new FileWriter(new File(path), false); // Overwrite`
- `FileWriter writer = new FileWriter(new File(path), true); // Append`
- `writer.write("Message to save in text file.\n"); // Write to stream`
- `writer.flush(); // Flush output to destination`
- `writer.close(); // Close output stream`

### BufferedReader: Character file input stream

- `BufferedReader reader = new BufferedReader(new FileReader(new File(path)));`
- `String message = reader.readLine(); // Read from input stream`
- `if (reader.ready()) // Test whether there are still characters to read`
- `reader.close(); // Close input stream`

### ObjectOutputStream: Data file output stream

- `ObjectOutputStream out`  
    `= new ObjectOutputStream(new FileOutputStream(new File(path)));`
- `out.writeUTF("Message");`
- `out.writeInt(99);`
- `out.writeDouble(44.5);`
- `out.writeBoolean(false);`
- `out.writeObject(serializableObject);`
- `out.flush();`
- `out.close();`

### BufferedReader: Data file input stream

- `ObjectInputStream in`  
    `= new ObjectInputStream(new FileInputStream(new File(path)));`
- `String s = in.readUTF();`
- `int i = in.readInt();`
- `double d = in.readDouble();`
- `boolean b = in.readBoolean();`
- `Object o = in.readObject();`
- `int availableBytesToRead = in.available();`
- `out.close();`