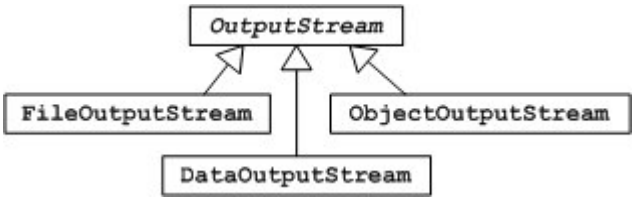
JAVA I/O SUMMARY

(note: all classes in java.io)

OUTPUT STREAM CLASSES



abstract class OutputStream

```
(writes raw bytes to a stream)
void close() throws IOException
void flush() throws IOException
void write(int b) throws IOException
void write(byte[] b) throws IOException
```

class FileOutputStream

```
(writes raw bytes to a file)
constructors:
   FileOutputStream(String name) throws
      FileNotFoundException
   FileOutputStream(String name,
                    boolean append)
      throws FileNotFoundException
   FileOutputStream(File file)
      throws FileNotFoundException
```

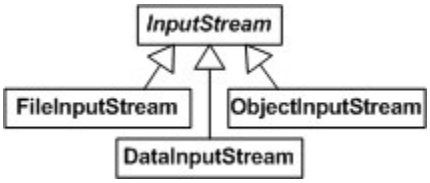
class DataOutputStream

```
(writes binary output to a stream)
constructor:
    DataOutputStream(OutputStream out)
void writeInt(int i) throws IOException
void writeDouble(double d) throws
     IOException
// plus write methods for all other
// primitive types
void writeUTF(String str) throws
    IOException
```

class ObjectOutputStream

```
(writes binary output, including objects,
        to a stream)
constructor:
    ObjectOutputStream(OutputStream out)
      throws IOException
void writeObject(Object obj) throws
     IOException
// plus writeInt, writeDouble, etc, as in
// DataOutputStream
```

INPUT STREAM CLASSES



abstract class InputStream

```
(reads raw bytes from a stream)
void close() throws IOException
int read() throws IOException
int read(byte[] b) throws IOException
```

class FileInputStream

```
(reads raw bytes from a file)
constructors:
    FileInputStream(String name)
        throws FileNotFoundException
    FileInputStream(File file)
        throws FileNotFoundException
```

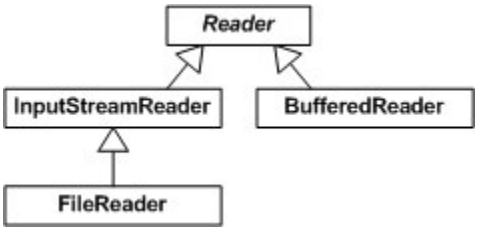
class DataInputStream

```
(reads binary input from a stream)
constructor:
   public DataInputStream(InputStream in)
int readInt() throws IOException
double readDouble() throws IOException
// plus read methods for all other
// primitive types
String readUTF() throws IOException
// all binary input methods throw
// EOFException at end of file
```

class ObjectInputStream

```
  (reads binary input, including objects,
   from a stream)
constructor:
   ObjectInputStream(InputStream in)
     throws IOException
Object readObject() throws
    ClassNotFoundException, IOException
// plus readInt, readDouble, etc., as in
// DataInputStream
```

READER CLASSES



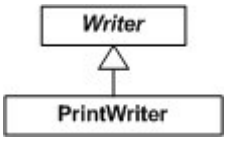
abstract class Reader
(reads characters from a stream)
void close() throws IOException
int read() throws IOException
returns -1 on EOF

class InputStreamReader
(reads characters from a stream)
constructor:
InputStreamReader(InputStream in)

class FileReader
(reads characters from a file)
constructors:
FileReader(String fileName) throws FileNotFoundException
FileReader(File file) throws FileNotFoundException

class BufferedReader
(reads characters or lines using a buffer)
constructor:
BufferedReader(Reader in)
String readLine() throws IOException
returns null on EOF

WRITER CLASSES



abstract class Writer
(writes characters or Strings to a stream)
void close() throws IOException
void flush() throws IOException
void write(int c) throws IOException
void write(String s) throws IOException

class PrintWriter
(writes any data type to a stream)
constructor:
PrintWriter(OutputStream out)
void print(int i)
void println(int i)
void print(Object obj)
void println(Object obj)
// plus print & println for all the other primitive types and Strings

MISCELLANEOUS

class System
constants:
InputStream in
PrintStream out
// a PrintStream has print & println
// like a PrintWriter

class File
(contains a file name & lets you query file properties & perform system functions)
constructors:
File(String pathname)
File(String parent, String child)
File(File parent, String child)
boolean canRead()
boolean canWrite()
boolean delete()
boolean exists()
String getAbsolutePath() // file name
long length()

class FileChooser
constants:
CANCEL_OPTION
ERROR_OPTION
APPROVE_OPTION
constructors:
JFileChooser()
JFileChooser(File currentFolder)
int showOpenDialog(Component parent)
int showSaveDialog(Component parent)
// return value from showOpenDialog
// or showSaveDialog is one of the
// three constants shown above
File getSelectedFile()

EXCEPTIONS

