

JAVA LAB

5th chapter



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1 Input and Output Stream

2 Readers and Writers

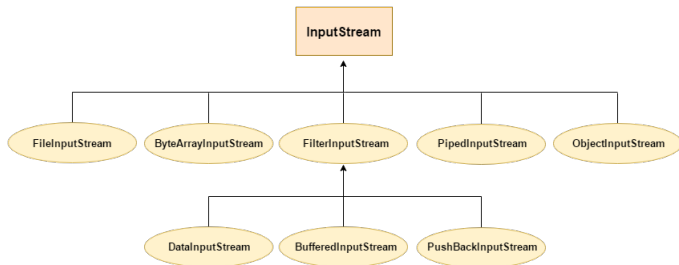
3 File I/O

4 Serialization

InputStream

Java application uses an input stream to read data from a source; it may be a file, an array, peripheral device or socket.

Here is the hierarchy of InputStream class.



methods in InputStream

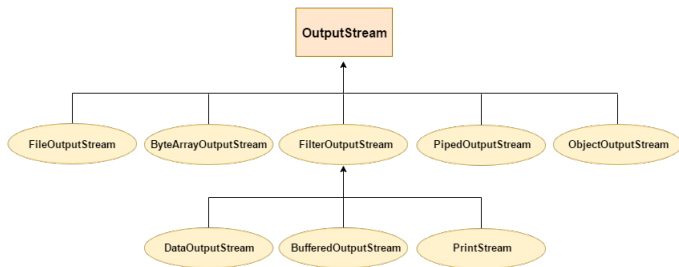
`int read()`

`int available()`

`void close()`

OutputStream

Java application uses an output stream to write data to a destination; it may be a file, an array, peripheral device or socket.



methods in OutputStream

`void write(int)`

`void flush()`

`void close()`

Reader and Writer

Reader class is the super class of all Reader's classes in java IO. Subclasses include a BufferedReader, PushbackReader, InputStreamReader, StringReader and several others.

The Java Writer class is the base class of all Writers in the Java IO API. Subclasses include BufferedWriter and PrintWriter among others.

Here is the simple example of **Reader and Writer** classes

File I/O

There are many ways of handling files in java-FileInputStream,FileOutputStream,FileReader,FileWriter Here is the sample program for **FILE I/O**

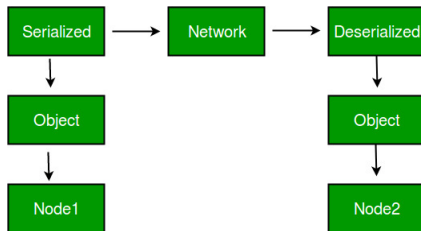
Serialization

It is very important concept in java.

Serialization is a mechanism of converting the state of an object into a byte stream.

Deserialization is a reverse process.

It is used to persist the object. This byte stream is platform independent. We can send this persistent object through the network unchanged.



Here is the sample program of **Serialization**.