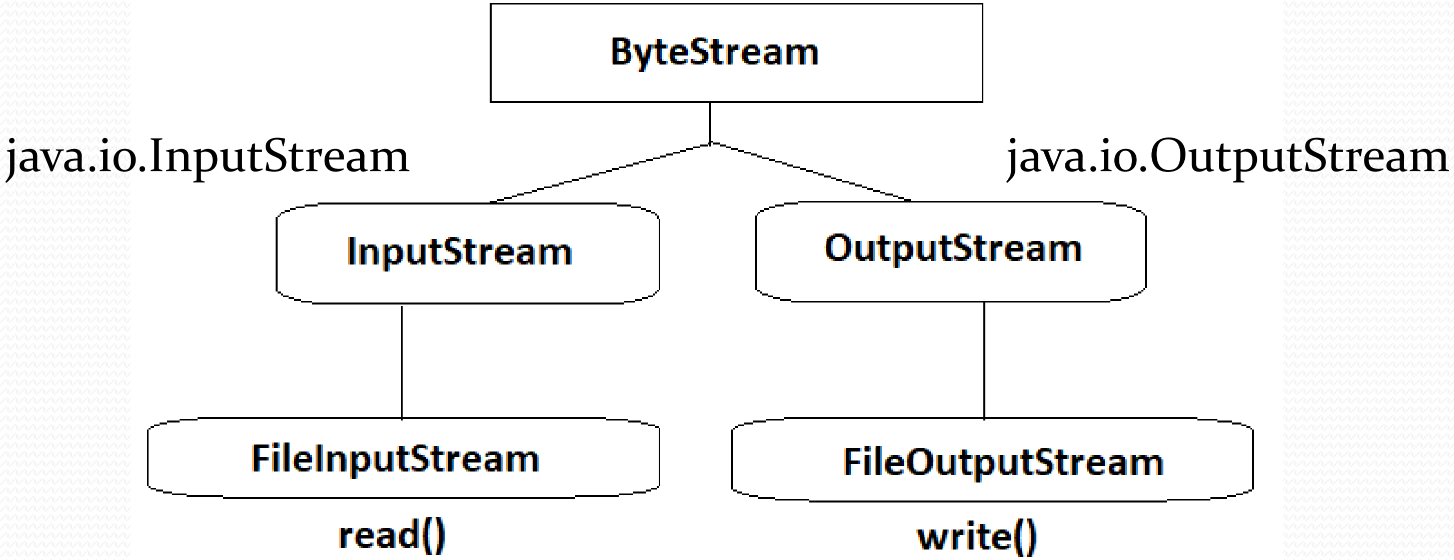
Understanding Byte Streams

- In byte streams data will be transferred in the form of bytes.
- In byte streams the length of each data packet is **1 byte**.
- All byte stream classes are sub classes for InputStream & OutputStream classes which are abstract classes. (present in 'java.io.InputStream' & 'java.io.OutputStream')
- We use extensions like "FileInputStream" and "FileOutputStream" classes in the coding.



ByteStream

java.io.InputStream

java.io.OutputStream

InputStream

OutputStream

FileInputStream

read()

FileOutputStream

write()

FileInputStream Class:

- FileInputStream Class is a normal class which extends InputStream class which is a abstract class.
- This class is always used to open the file in read mode. (int read() is an abstract method in InputStream class, in FileInputStreamClass it has been overridden).

Syntax:

- FileInputStream fis=new FileInputStream("abc.txt");
- In the above syntax if the file is not available at the given URL the FileInputStream object will throw a FileNotFoundException
- The read() method on success will returns the ASCII value of the character(ie., int datatype), If failed returns '-1'

FileOutputStream Class

- FileOutputStream class is a normal class which extends OutputStream class which is a abstract class.
- This class is always used to open the file in write mode.

Syntax:

  - FileOutputStream(String filePath)
  - FileOutputStream(File fileObject)
  - FileOutputStream(String filePath,boolean append)

- If we are trying to write some data in to the file by using write() method, then compiler will check if there is any file present in that given URL.

- If the file is present then the file will be opened and the existing content will be deleted in the file.
- If the file is not present then a new file will be created with the name given in the path.
- While using FileOutputStream if we don't want to override the existing data in the file the we should use append mode.(set it as true).

1) WAP to copy the contents of source file in to the destination file.
2) WAP to write the file using FileOutputStream and use append mode.
3) WAP to copy source Image in to destination Image.