Week 8

try...catch...finally 成本太高

如果不是必须hadle的exception的情况，尽量不用，比如：

如果 I / j ，j = 0，可以检查j非零，而不是catch exception

P202 的example；exception不是method的feature，所以override不会需要throw同样的exception，或者需要处理同样的异常

File:

position in FIG
↓

File

like a
array

read
write } operation
seek

operation

max length determined by bits of an OS, like 64 bits

get read or overwritten

pos

① transfer

→ write operation

→ disk

② transfer

file.read

OS. read
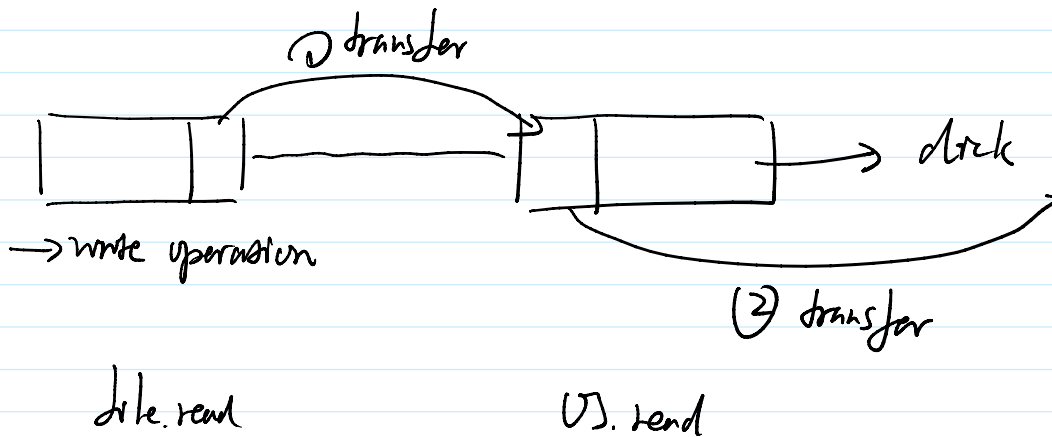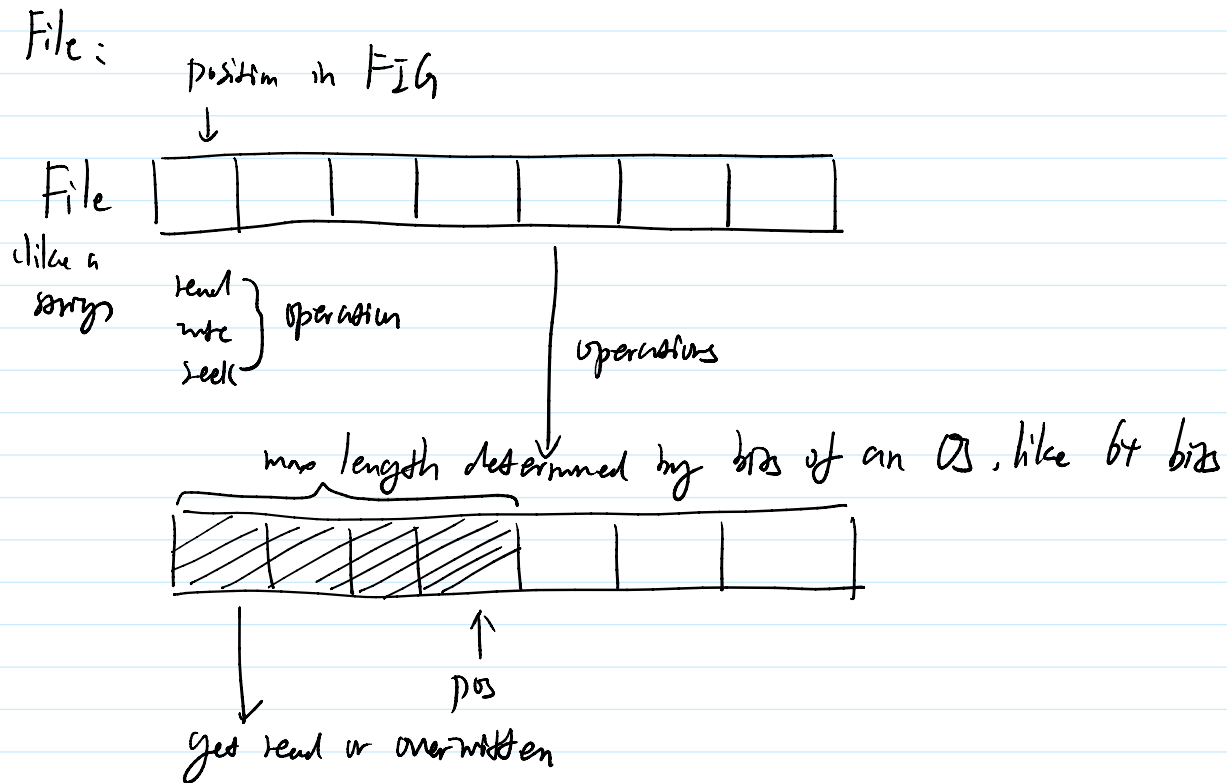
Write to disk will not happen right away until the buffer is full, b/c writing to physical medium right after the buffer has something, but not full, is very expensive. This operation would cause an interrupt.

The difference between Write and InputStream:

Write: Interpretation to human (using characters);
InputStream: don't care about interpretation to human (using bytes)

Files system: (like a tree)
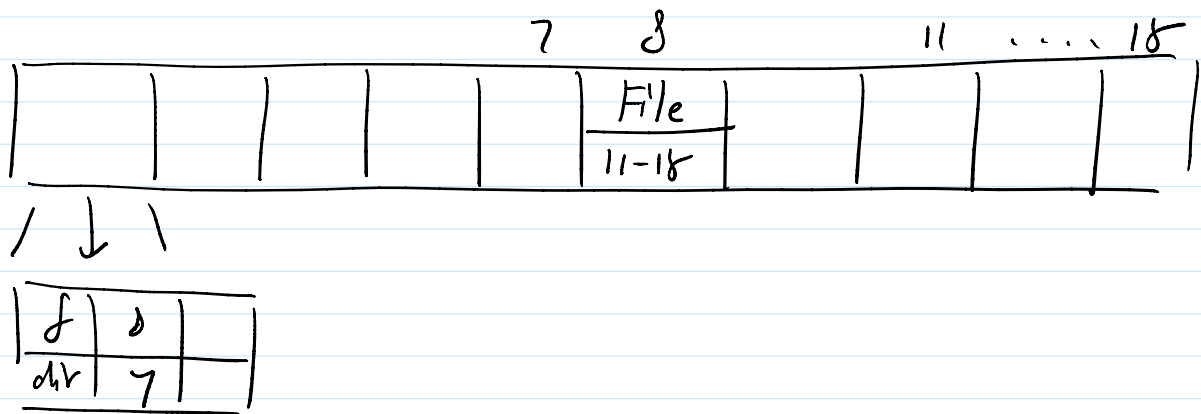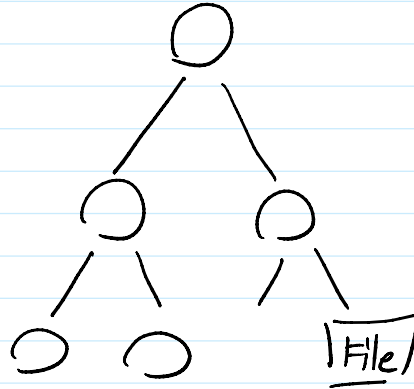
System.out.println() - buffered;
System.err.println() - not-buffered;

mixed-use of them will not guarantee the print order organized b the programmer. Generally, not - buffered is faster then buffered.
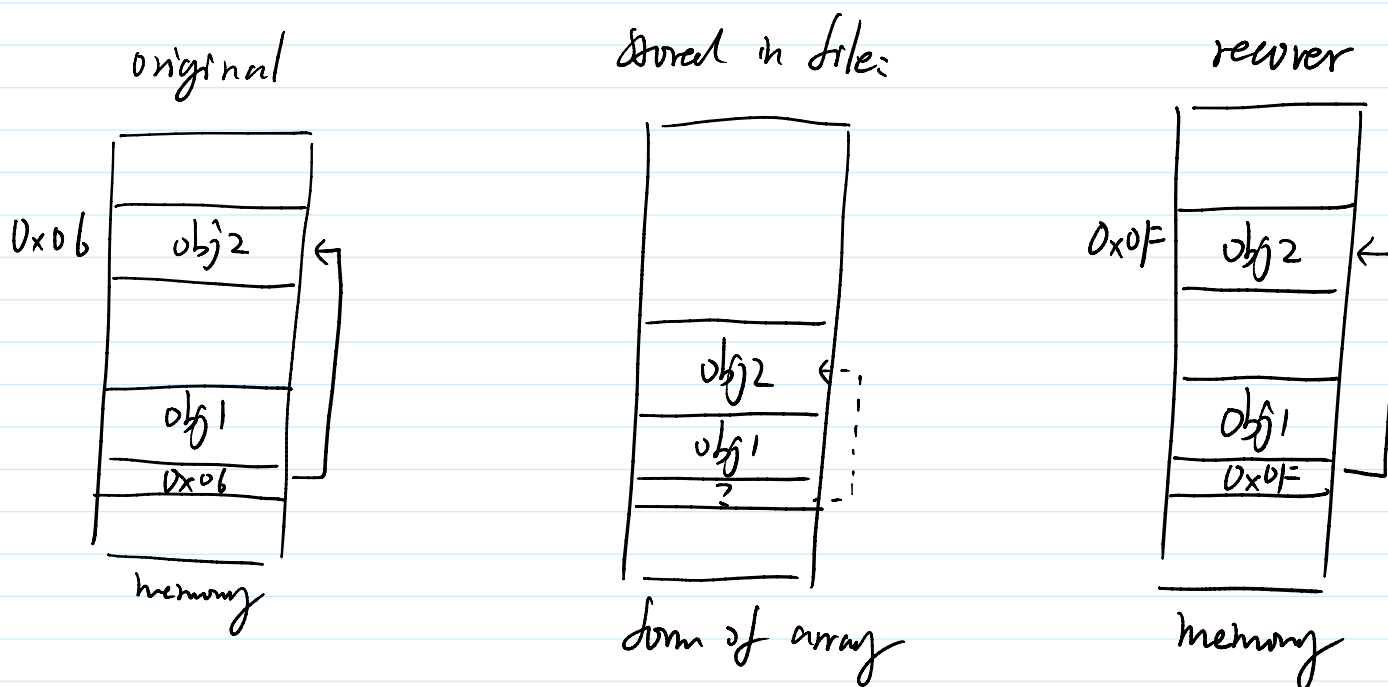
Try with resourse:
try block cannot use if statement, but can use ? :

Hw 7:

Java Class: GZIPInputStream;
implements: Closeable, AutoCloseable;
extends: InflaterInputStream;

Serialization model:

original   stored in file: recover

0x06   obj2   obj2   0x0F   obj2

obj1   obj1   obj1

0x06   ?   0x0F

memory   form of array   memory

```
SplittableListSolution.java:4: warning: [serial] serializable class SplittableListSolution has no definition of serialVersionUID
public class SplittableListSolution<T> extends Vector<T> {
       ^
SplittableListSolution2.java:6: warning: [serial] serializable class SplittableListSolution2 has no definition of serialVersionUID
public class SplittableListSolution2<T> extends Vector<T> {
```

解决方法:

The serialization runtime associates with each serializable class a version number, called a serialVersionUID, which is used during deserialization to verify that the sender and receiver of a serialized object have loaded classes for that object that are compatible with respect to serialization. If the receiver has loaded a class for the object that has a different serialVersionUID than that of the corresponding sender's class, then deserialization will result in an InvalidClassException. A serializable class can declare its own serialVersionUID explicitly by declaring a field named "serialVersionUID" that must be static, final, and of type long:

 ANY-ACCESS-MODIFIER static final long serialVersionUID = 42L;

https://docs.oracle.com/en/java/javase/12/docs/api/java.base/java/io/Serializable.html

CompareTo 和 Compartor 的区别: (week8 的Recitation)

1. CompareTo: 需要修改比较类的code，实现compareTo();
2. Compartor: 不需要修改比较类的code就可以比较