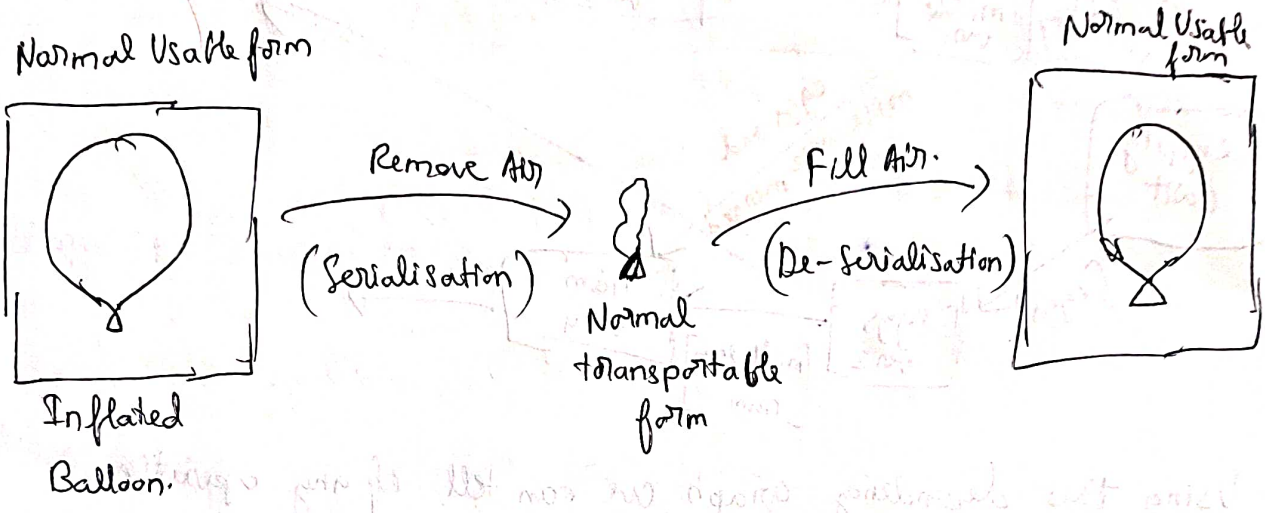
Durga Software Solns (Serialisation)

(Part-1)

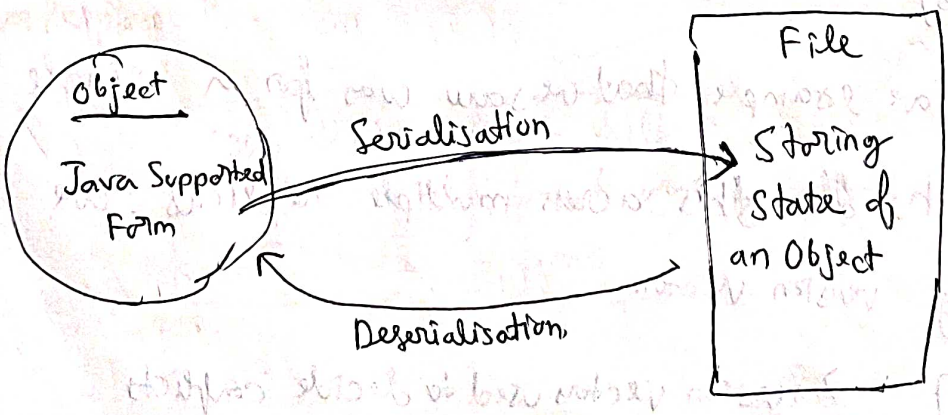
Example



When an Object is converted ~~to~~ from its Normal Usable form to its transportable form then it is called serialisation.

And when it is converted from transportable format to normal usable format, then its called ~~Normal~~ De-serialisation.

In Java Example

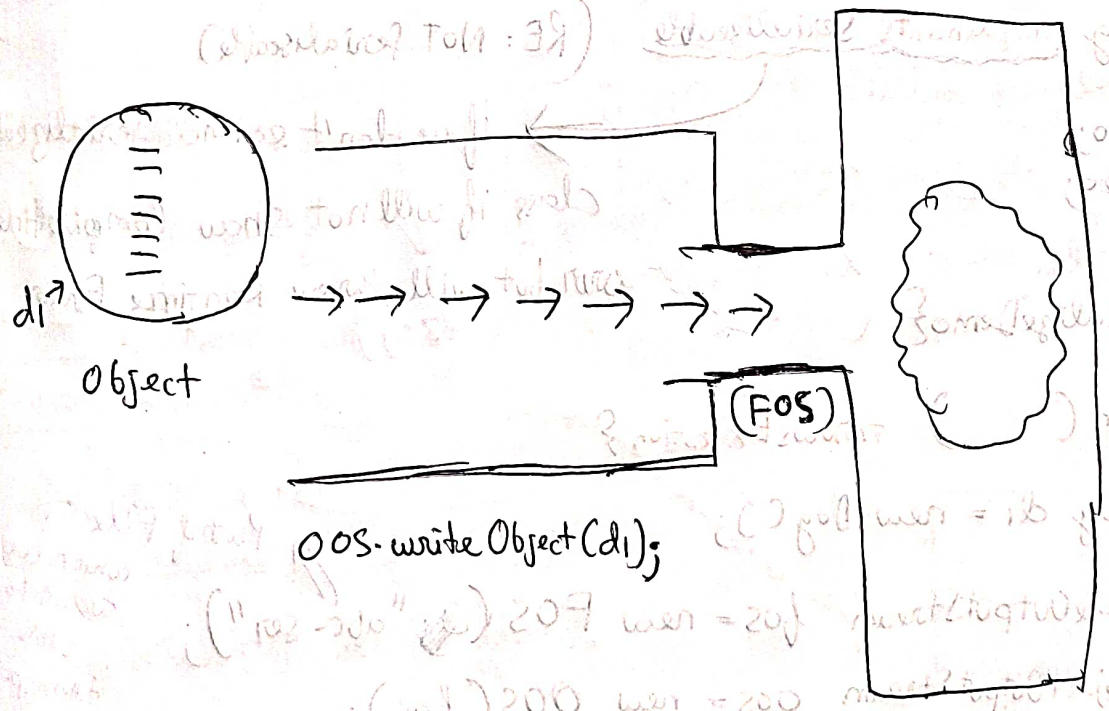


Q) How serialisation can be achieved ?

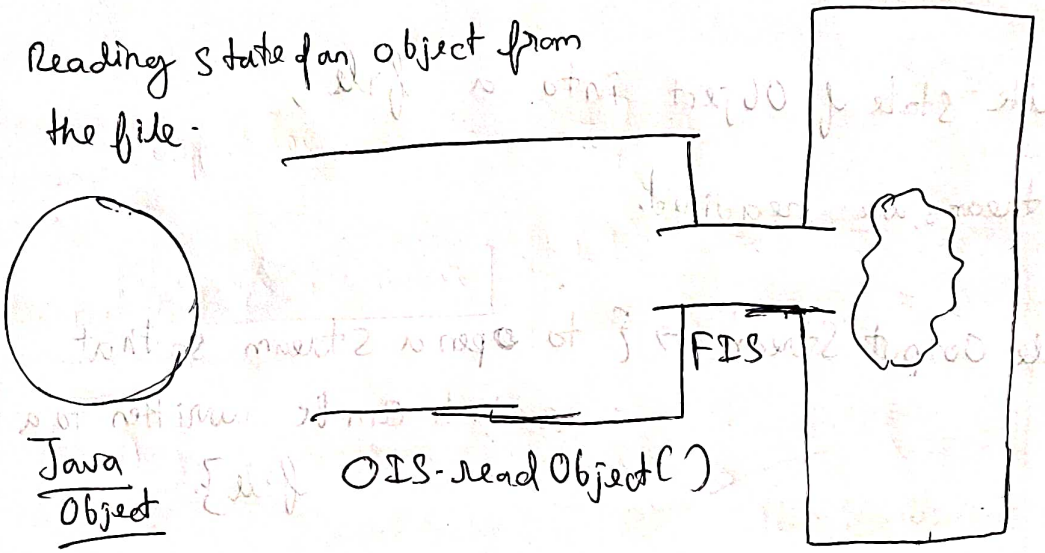
A) To write state of Object into a file, two streams are required.

FOS → File Output Stream → { to open a stream so that contents can be written to a file }.

OOS → Object Output Stream → { Since ~~Files can~~ direct Java Objects cannot be written in a File and they need to be converted into binary. Hence OOS is required }



Q) How deserialisation can be implemented?



FIS → File Input Stream { Read binary Data from file }

OIS → Object Input Stream { Convert binary Data into Java Object }

(Part-2) [Demo Code Implementation]

```
Class Dog implements Serializable   (RE: NOT Serialiseable)
{
   int i=10;
   int j=20;
}
Class SerializeDemo{
   psvm ( ) throws Exception {
(Serialization) Dog d1 = new Dog();
   FileOutputStream fos= new FOS("abc.ser");
   ObjectOutputStream oos= new OOS(fos);
   oos.writeObject(d1);
(Deserialisation) Dog d2
   FileInputStream fis= new FIS("abc.ser");
   ObjectInputStream ois= new OIS(fis);
   d2= ois.readObject();
```

→ if we don't extend Serializable class if will not show Compile time error but will threw Runtime Error

Path of File in which we want to store transport format

Path of file from which we want to deserialize data