Assignment IO OPERATION

Ans 1 . A Stream can be defined as a sequence of data. The Input Stream is used to read data from a source and the Output Stream is used for writing data to a destination

Ans 2. Various methods of Output Stream:

- write() - writes the specified byte to the output stream
- write(byte[] array) - writes the bytes from the specified array to the output stream
- flush() - forces to write all data present in the output stream to the destination
- close() - closes the output stream

Ans 3. Serialization is the process of converting an object into a stream of bytes to transfer it over a network or to store it in a file or database. In Java, serialization is done by implementing the Serializable interface.

Ans 4: The Serializable interface in Java is a marker interface that has no methods. It is used to mark classes that can be serialized, means their object instances can be converted into a stream of bytes.

Ans 5: Deserialization is the process of converting a stream of bytes back into an object instance. This is done after an object has been serialized.

Ans 6: Serialization is achieved in Java by implementing the Serializable interface. When an object is serialized, its state is converted into a stream of bytes, which can then be transferred over a network or stored in a file or database.

Ans 7: Deserialization is achieved by reading a stream of bytes and using them to recreate the original object instance.

Ans 8 : Mark member variables as static or transient, and those member variables will no more be a part of Serialization.

Ans 9: The following classes are available in the Java IO API are:

- File
- RandomAccessFile
- FileInputStream
- FileReader

- FileMutputStream
- FileWriter

Ans 10:Difference between Serizable and Externalizable Interface:

Serializable	Externalizable
A serializable interface is used to implement serialization.	An externalizable interface used to implement Externalization
Serializable is a marker interface,it does not contain any method.	The externalizable interface is not a marker interface and thus it defines two methods writeExternal() and ReadExternal().
Serialization using a serializable interface has bad performance.	Serialization using an externalizable interface has better performance.