**How to serialize ArrayList in java**

[**JAVA COLLECTIONS**](http://beginnersbook.com/category/java-collections/)

[**ArrayList**](http://docs.oracle.com/javase/6/docs/api/java/util/ArrayList.html) is [**serializable**](http://docs.oracle.com/javase/6/docs/api/java/io/Serializable.html) by **default**. This means you need not to implement Serializable interface explicitly in order to serialize an ArrayList. In this tutorial we will learn how to serialize and de-serialize an ArrayList.

**Example:**

**Serialization**: Run the below class and it will create a file *myfile* which will be having ArrayList object in form of Stream of bytes. We would be using “myfile” at the receivers end to recreate the Object from stream of bytes.**Note**: We did not implemented the Serializable interface in the below class because ArrayList is already been serialized by default.

package beginnersbook.com;

import java.util.ArrayList;

import java.io.\*;

public class ArrayListSerialization

{

public static void main(String [] args)

{

ArrayList<String> al=new ArrayList<String>();

al.add("Hello");

al.add("Hi");

al.add("Howdy");

try{

FileOutputStream fos= new FileOutputStream("myfile");

ObjectOutputStream oos= new ObjectOutputStream(fos);

oos.writeObject(al);

oos.close();

fos.close();

}catch(IOException ioe){

ioe.printStackTrace();

}

}

}

**De-Serialization**:

In this class we are retrieving the stream of bytes from *myfile* which we have stored using the above class. We are type casting the returned object to ArrayList and displaying the elements of ArrayList. Observe the output: We are getting the same elements which we have added to the ArrayList before the serialization.

package beginnersbook.com;

import java.io.\*;

import java.util.ArrayList;

public class DeSerializationClass

{

public static void main(String [] args)

{

ArrayList<String> arraylist= new ArrayList<String>();

try

{

FileInputStream fis = new FileInputStream("myfile");

ObjectInputStream ois = new ObjectInputStream(fis);

arraylist = (ArrayList) ois.readObject();

ois.close();

fis.close();

}catch(IOException ioe){

ioe.printStackTrace();

return;

}catch(ClassNotFoundException c){

System.out.println("Class not found");

c.printStackTrace();

return;

}

for(String tmp: arraylist){

System.out.println(tmp);

}

}

}

Output:

Hello

Hi

Howdy