```
// Copying characters from one file into another
import java.io.*;
class CopyCharacters
{     public static void main(String args[])
      {
          // Declare and create input and output files
          File inFile = new File("input.dat");
          File outFile = new File("output.dat");
          FileReader ins = null;  // Creates file stream ins
          FileWriter outs = null; // Creates file stream outs

          try
          {
                ins = new FileReader(inFile);  // Opens inFile
                outs = new FileWriter(outFile);// Opens outFile

                // Read and write till the end
                int ch;
                while((ch = ins.read()) != -1)
                {
                     outs.write(ch);
                }
           }
           catch(IOException e)
           {
                System.out.println(e);
                System.exit(-1);
           }
           finally        // Close files
           {
                try
                {
                     ins.close();
                     outs.close();
                }
                catch(IOException e) { }
           }
      }
}
```

```
// Writing bytes to a file
import java.io.*;
class WriteBytes
{
    public static void main(String args[])
    {
        // Declare and initialize a byte array
        byte cities[] = {'D','E','L','H','I','\n','M','A','D',
                'R','A','S','\n','L','O','N','D','O','N','\n'};

        // Create an output file stream
        FileOutputStream outfile = null;
        try
        {
            // Connect the outfile stream to "city.txt"
            outfile = new FileOutputStream("city.txt");

            // Write data to the stream
            outfile.write(cities);

            outfile.close();
        }
        catch(IOException ioe)
        {
            System.out.println(ioe);
            System.exit(-1);
        }
    }
}
```

```
// Reading bytes from a file

import java.io.*;
class ReadBytes
{
    public static void main(String args[])
    {
        // Create an input file stream
        FileInputStream infile = null;
        int b;
        try
        {
            // Connect infile stream to the required file
            infile = new FileInputStream(args[0]);

            // Read and display data
            while((b = infile.read()) != -1)
            {
                System.out.print((char)b);
            }
            infile.close();
        }
        catch(IOException ioe)
        {
            System.out.println(ioe);
        }
    }
}
```

```
// Reading and writing primitive data
import java.io.*;
class ReadWritePrimitive
{
    public static void main(String args[]) throws IOException
    {
        File primitive = new File("prim.dat");
        FileOutputStream fos = new FileOutputStream(primitive);
        DataOutputStream dos = new DataOutputStream(fos);

        // Write primitive data to the "prim.dat" file
        dos.writeInt(1999);
        dos.writeDouble(375.85);
        dos.writeBoolean(false);
        dos.writeChar('X');
        dos.close();
        fos.close();

        // Read data from the "prim.dat" file
        FileInputStream fis = new FileInputStream(primitive);
        DataInputStream dis = new DataInputStream(fis);
        System.out.println(dis.readInt());
        System.out.println(dis.readDouble());
        System.out.println(dis.readBoolean());
        System.out.println(dis.readChar());
        dis.close();
        fis.close();
    }
}
```