

# CMPE 331

## Examples

November 5, 2018

1. Copying an existing file into another one, example of ByteStream

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```
import java.io.*;
public class CopyFile {
    // Files at thr root folder of the project
    public static void main(String args[]) throws IOException {
        FileInputStream in = null;
        FileOutputStream out = null;

        try {
            in = new FileInputStream("input.txt");
            out = new FileOutputStream("output.txt");

            int c;
            while ((c = in.read()) != -1) {
                out.write(c);
            }
        } finally {
            if (in != null) {
                in.close();
            }
            if (out != null) {
                out.close();
            }
        }
    }
}
```

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2. InputStream and OutputStream example

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```
import java.io.*;
public class fileStreamTest {
    // Files at thr root folder of the project
    public static void main(String args[]) {

        try {
            byte bWrite [] = {11,21,3,40,5};
            OutputStream os = new FileOutputStream("test.txt");
            for(int x = 0; x < bWrite.length ; x++) {
                os.write( bWrite[x] ); // writes the bytes
            }
            os.close();

            InputStream is = new FileInputStream("test.txt");
            int size = is.available();

            for(int i = 0; i < size; i++) {
```

```

        System.out.print((char)is.read() + " ");
    }
    is.close();
} catch (IOException e) {
    System.out.print("Exception");
}
}
}

```

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### 3. File reader example with FileInputStream

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```

package filepackage;
import java.io.*;
public class FileReadingDemo {
    // Files at the root folder of the project
    public static void main(String[] args) {
        InputStream istream;
        OutputStream ostream;
        int c;
        final int EOF = -1;
        ostream = System.out;
        try {
            File inputFile = new File("Data.txt");
            istream = new FileInputStream(inputFile);
            try {
                while ((c = istream.read()) != EOF)
                    ostream.write(c);
            } catch (IOException e) {
                System.out.println("Error: " + e.getMessage());
            } finally {
                try {
                    istream.close();
                    ostream.close();
                } catch (IOException e) {
                    System.out.println("File did not close");
                }
            }
        } catch (FileNotFoundException e) {
            e.printStackTrace();
            System.exit(1);
        }
    }
}

```

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### 4. File reader example with FileInputStream with Java version 7 specific code.

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```

package filepackage;
import java.io.*;
public class FileReadingJava7Way {
    // Files at the root folder of the project
    public static void main(String[] args) {
        File file = new File("Data.txt");
        try (FileInputStream fis = new FileInputStream(file)) {
            int content;
            while ((content = fis.read()) != -1) {
                // convert to char and display it
                System.out.print((char) content);
            }
        }
    }
}

```

```
    } catch (IOException e) {  
        e.printStackTrace();  
    }  
}
```

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