Chapter 4

Text File Output using the PrintWriter CLass

Text File Output using the *PrintWriter* Class

- *PrintWriter* Class—
  - » defines "file output stream objects" that connect to text files on a disk (files opened as *output*, not *input*)
  - » objects of *PrintWriter* behave in the same way as **System.out** behaves (similar methods exist)
- Procedure of opening a text output files:
  1. create PrintWriter output stream object
  2. attach object to disk file via **FileOutputStream** class
  3. use object for output
  4. close output stream *(errors occur if file not closed)*

```
/* Program: FileOut.java */

/*f*/ import java.io.*;
      import javax.swing.*;

 // program class FileOut
public class FileOut
{
    public static void main(String args[])
    {
/*f*/   String fileName = "";          // name of disk file
/*f*/   PrintWriter outStream = null;  // output stream object for file

        int x = 0,         // value entered by user
            count = 0;     // loop counter

        //-----------------------------------------------------------
/*f*/   fileName = "result.txt";  // name of disk file to hold output

/*f*/   try   // try to open/create file, catch any errors (problems)
/*f*/   {
            // create new PrintWriter object, attach to fileName
/*f*/      outStream = new PrintWriter (new FileOutputStream(fileName));
/*f*/   }
/*f*/   catch (IOException e)   // catch I/O error; show message and stop
/*f*/   {
            System.out.println ("Error opening file: "+fileName);
/*f*/       System.exit(0);      // stop program and exit (kill application)
/*f*/   }

...
```



```
...
        //-----------------------------------------------------------
          // get value of x from the user (parse string to obtain int value)
        x = Integer.parseInt(
               JOptionPane.showInputDialog("What is the value of x"));

          // display heading information, to console and file
        System.out.println ("Table of *"+x+", /"+x+", and +"+x);
        System.out.println ("\n value\t *x\t /x\t +x");
/*f*/   outStream.println ("Table of *"+x+", /"+x+", and +"+x);
/*f*/   outStream.println ("\n value\t *x\t /x\t +x");

        while (count < 11)  // loop while count is < 11 (0..10)
        {    // send to console
            System.out.print (" "+count);
            System.out.print ("\t"+(count*x));
            System.out.print ("\t"+(count/x));
            System.out.println ("\t"+(count+x));

             // send to file
/*f*/       outStream.print (" "+count);
/*f*/       outStream.print ("\t"+(count*x));
/*f*/       outStream.print ("\t"+(count/x));
/*f*/       outStream.println ("\t"+(count+x));

            count++;    // increment count by 1
        } // end of loop
        System.out.println ("-------------------------");
/*f*/   outStream.println ("-------------------------");

/*f*/   outStream.close();   // close disk file
        System.exit(0);      // end program

     }// end of main()

}// end of program class FileOut
```