import java.util.*;

/**
 * Directory of JFiles.
 *
 * A Directory is a JFile that maintains a table of the JFiles it contains
 *
 * @version 6
 */

public class Directory extends JFile {

private TreeMap jfiles;  // table for JFiles in this Directory

/**
 * Construct a Directory.
 *
 * @param name     the name for this Directory (in its parent Directory)
 * @param creator  the owner of this new Directory
 * @param parent   the Directory in which this Directory lives.
 */

public Directory( String name, User creator, Directory parent) {
    super( name, creator, parent );
    jfiles = new TreeMap();
}

/**
 * The size of a directory is the number of TextFiles it contains.
 *
 * @return the number of TextFiles.
 */

public int getSize() {
    return jfiles.size();
}

/**
 * Suffix used for printing Directory names; we define it as the (system dependent)
 * name separator used in path names.
 *
 * @return the suffix for Directory names.
 */

public String getSuffix() {
    return  JFile.separator;
}

/**
 * Add a JFile to this Directory. Overwrite if a JFile
 * of that name already exists.
 *
 * @param name the name under which this JFile is added.
 * @param afile the JFile to add.
 */

public void addJFile(String name, JFile afile) {
    jfiles.put( name, afile );
    setModDate();
}

/**
 * Get a JFile in this Directory, by name.
 *
 * @param filename the name of the JFile to find.
 * @return the JFile found.
 */

public JFile retrieveJFile( String filename ) {
    JFile aFile = (JFile)jfiles.get( filename );
    return aFile;
}

/**
 * Get the contents of this Directory as an array of the file names, each of which is a String.
 *
 * @return the array of names.
 */

public String[] getFileNames() {
    return (String[])jfiles.keySet().toArray( new String[0] );
}