Selected files

3 printable files

```
CS5800_Q5\src\com\cpp\cs5800q5\CS5800_Q5.java
CS5800_Q5\src\com\cpp\cs5800q5\File.java
CS5800_Q5\src\com\cpp\cs5800q5\Folder.java
```

CS5800_Q5\src\com\cpp\cs5800q5\CS5800_Q5.java

```java
package com.cpp.cs5800q5;

public class CS5800_Q5 {
    public static void main(String[] args) {
        // root folder
        Folder phpDemo1 = new Folder("php_demo1");

        Folder sourceFiles = new Folder("Source Files");
        Folder includePath = new Folder("Include Path");
        Folder remoteFiles = new Folder("Remote Files");
        phpDemo1.addFolder(sourceFiles);
        phpDemo1.addFolder(includePath);
        phpDemo1.addFolder(remoteFiles);

        // inside source files folder
        Folder phalcon = new Folder(".phalcon");
        Folder app = new Folder("app");
        Folder cache = new Folder("cache");
        Folder publicFolder = new Folder("public");
        sourceFiles.addFolder(phalcon);
        sourceFiles.addFolder(app);
        sourceFiles.addFolder(cache);
        sourceFiles.addFolder(publicFolder);
        sourceFiles.addFile(new File(".htaccess"));
        sourceFiles.addFile(new File(".htrouter.php"));
        sourceFiles.addFile(new File("index.html"));

        // inside app folder
        Folder config = new Folder("config");
        Folder controllers = new Folder("controllers");
        Folder library = new Folder("library");
        Folder migrations = new Folder("migrations");
        Folder models = new Folder("models");
        Folder views = new Folder("views");
        app.addFolder(config);
        app.addFolder(controllers);
        app.addFolder(library);
        app.addFolder(migrations);
        app.addFolder(models);
        app.addFolder(views);

        System.out.println("Folder structure: ");
        phpDemo1.print("");
        System.out.println();

        // Delete the "app" folder
        System.out.println("Removal of app folder: ");
        sourceFiles.removeFolder("app");
        phpDemo1.print("");
        System.out.println();

        // Delete the "public" folder
        System.out.println("Removal of public folder: ");
        sourceFiles.removeFolder("public");
        phpDemo1.print("");
        System.out.println();

    }

}

```

CS5800_Q5\src\com\cpp\cs5800q5\File.java

```
package com.cpp.cs5800q5;

```

```java
public class File {
    private String name;

    public File(String name) {
        this.name = name;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public void print(String currentFileDirectory) {
        System.out.println(currentFileDirectory + this.name);
    }

}


```

CS5800_Q5\src\com\cpp\cs5800q5\Folder.java

```java
package com.cpp.cs5800q5;

import java.util.ArrayList;
import java.util.List;

public class Folder {

    private String name;
    private List<Folder> subFolders;
    private List<File> files;

    public Folder(String name) {
        this.name = name;
        this.subFolders = new ArrayList<>();
        this.files = new ArrayList<>();
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public List<Folder> getSubFolders() {
        return subFolders;
    }

    public void setSubFolders(List<Folder> subFolders) {
        this.subFolders = subFolders;
    }

    public List<File> getFiles() {
        return files;
    }

    public void setFiles(List<File> files) {
        this.files = files;
    }

    public void addFolder(Folder folder) {
        this.subFolders.add(folder);
    }

    public void addFile(File file) {
        this.files.add(file);
    }

    public void removeFolder(String folderName) {
        subFolders.removeIf(folder -> folder.getName().equals(folderName));
    }
```

```java


    public void print(String currentFolderDirectory) {
        System.out.println(currentFolderDirectory + " " + name);

        for(Folder folder : subFolders) {
            folder.print(currentFolderDirectory + "   |");
        }

        for(File file : files) {
            file.print(currentFolderDirectory + "   |" + "");
        }
    }
}
```