# WEEK 2. INPUT/OUTPUT FILE SYSTEM

## Reading from text files and writing into them.

**Libraries:** System.IO
**Classname:** File (static class), StreamReader, StreamWriter
**Useful methods:**
FIle.WriteAllText(): return type: string, File.ReadAllText(): return type: string, FIle.ReadLines(): return type: string[].
StreamReader.ReadToEnd(): return type: string, StreamReader.ReadLine(): return type: string, StreamReader.Close(): void.
StreamWriter.Write(): return type: string, StreamWriter.WriteLine(): return type: string, StreamWriter.Close(): void.
How to: Write to a Text File (C# Programming Guide)
How to: Read From a Text File (C# Programming Guide)
How to: Read a Text File One Line at a Time (Visual C#)

## Directory Tree, Information about files.

**Libraries**: System.IO
**Classname**: FileInfo, DirectoryInfo
**Useful fields**:
FileInfo.Name, FileInfo.FullName, FileInfo.DirectoryName
DirectoryInfo.Name, DirectoryInfo.Parent, DirectoryInfo.Root, DirectoryInfo.FullName
**Useful methods**:
DirectoryInfo.GetFiles(): return type: FileInfo[], DirectoryInfo.GetFileSystemInfos(): return type: FileSystemInfo[], DirectoryInfo.GetDirectories(): return type: DirectoryInfo[].

How to: Iterate Through a Directory Tree (C# Programming Guide)
How to: Get Information About Files, Folders, and Drives (C# Programming Guide)

## File Manipulating(Creating, Moving, Deleting)

**Libraries**: System.IO
**Classname**: Path(static class), Directory(static class), File(static class)
**Useful methods:**
Path.Combine(string path, string name): return type: string
//Adds name to the path, as result we got one path type of string;
Directory.CreateDirectory(string path): void
//creates a directory
File.Create(string path): void
//creates a file
File.Copy(string sourceFile, string destFile, bool overwrite)
//copies a file from one path to another
File.Move(string sourceFile, string destFile)
//copies a file from one path to another

Directory.Move(string source, string dest)
//copies a folder from one path to another
File.Delete(string path)
//deletes a file
Directory.Delete(string path)
//deletes a directory

How to: Create a File or Folder (C# Programming Guide)
How to: Copy, Delete, and Move Files and Folders (C# Programming Guide)

## Task 1. (20%)

Read a string from the file and check if it is polindrome or not. Yes or No

| Sample Input | Sample Output |
|---|---|
| ababa | Yes |

## Task 2. (30%)

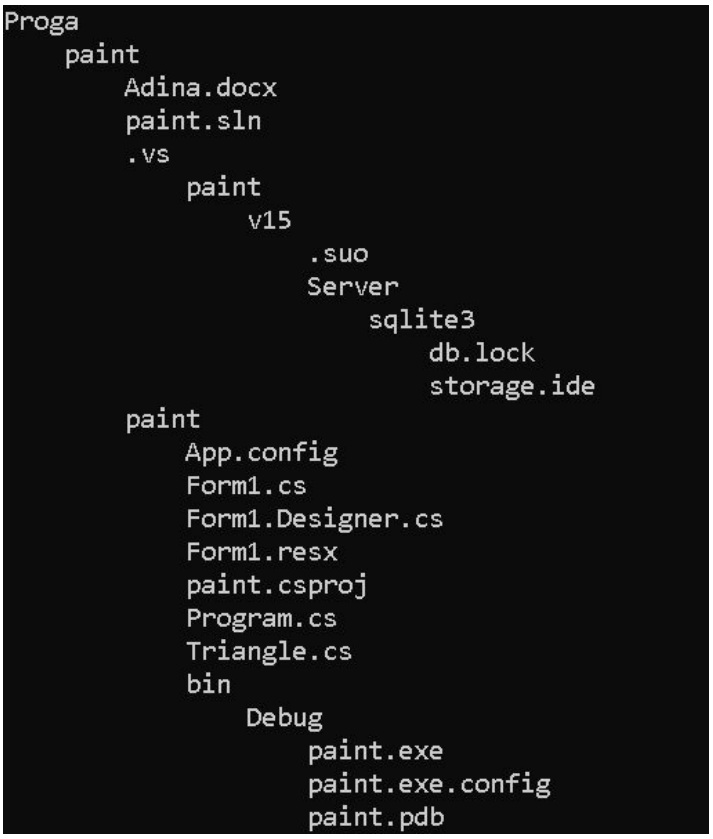
Read an array of numbers from the file, if the number from array is prime write it in another file.

input:


output:


## Task 3. (30%)

Write in console all the files and directories that are located in string path.
Note: you should also check each directory for files and more directories.
Example:




## Task 4. (20%)

Create a file in the directory path, then copy it to the directory path1 and delete the original one.