You have been provided with a `Main.java` file that implements a data structure for representing the directory hierarchy of a file system in a computer. The file includes an interface `FSObject` and three classes that implement the interface and contain a constructor and getters. These three classes are:

- A class `File` which has two fields: a name and the size of the file
- A class `Directory` which has two fields: a name and a list of the file system objects the directory contains
- A class `Link` which has two fields: a name and the path to the file or directory that it links to

The code also contains test code in the main function that is expected to work for a correct solution. Do not modify this test code.

1. In `main`, create a value `myFS` of type `FSObject` that stores a file system object with the following hierarchy:

```
dirA
+---- dirB
|      +---- dirC
|      |      +---- file1 (4096 B)
|      |      +---- file2 (2097152 B)
|      |      +---- linkX -> dirA/dirD/file4
|      +---- linkY -> dirA/dirD/file4
+---- dirD
       +---- file3 (4194304 B)
       +---- file4 (128 B)
       +---- linkZ -> dirA/dirB/dirC/file1
```

2. Add an instance method `totalSize` that returns the total size of all the files in the hierarchy.
3. Create a visitor `FSObjectVisitor` that visits `FSObject` and its subtypes. You may modify `FSObject` and its subtypes to accept `FSObjectVisitor`.
4. Use `FSObjectVisitor` to define a custom visitor called `PrintLargeFilesVisitor` that prints the names of all the files larger than 1 MiB (1048576 B).

Assessment
Solutions should be:
- Correct
- In good style, including indentation and line breaks
- Written using features discussed in class

Submission Instructions
Submit your `Main.java` file via Moodle. Do not submit any other files or compressed folders.