Coursework 7CCSMSEN

This coursework is worth 4% and is due on 19 October at 16:00. You are asked to implement a regular expression matcher and submit a document containing the answers for the questions below. You can do the implementation in any programming language you like, but you need to submit the source code with which you answered the questions, otherwise a mark of 0% will be awarded. You can submit your answers in a txt-file or pdf. Code send as code.

Disclaimer

It should be understood that the work you submit represents your own effort. You have not copied from anyone else. An exception is the Scala code I showed during the lectures or uploaded to KEATS, which you can freely use.

Task

A Unix directory might look as follows:

```
$ ls -ld . * */*
drwxr-xr-x 1 ping staff  32768 Apr  2 2010 .
-rw----r-- 1 ping students  31359 Jul 24 2011 manual.txt
-r--rw--w- 1 bob students   4359 Jul 24 2011 report.txt
-rwsr--r-x 1 bob students 141359 Jun  1 2013 microedit
dr--r-xr-x 1 bob staff  32768 Jul 23 2011 src
-rw-r--r-- 1 bob staff  81359 Feb 28 2012 src/code.c
-r--rw---- 1 emma students    959 Jan 23 2012 src/code.h
```

with group memberships assigned as follows:

Members of group staff:	ping, bob, emma
Members of group students:	emma

The file microedit is a text editor, which allows its users to open, edit and save files. Note carefully that microedit has set its setuid flag. Fill in the access control matrix below that shows for each of the above five files, whether ping, bob, or emma are able to obtain the right to read (R) or replace (W) its contents using the editor microedit.

	manual.txt	report.txt	microedit	src/code.c	src/code.h
ping					
bob					
emma					