4. **Access Control**

This is a simplified dump of the `ls -l` shell command in the current folder.

```
-rw-r--r-- alice   alice   1
-rw-rw-r-- bob     admins  2
-rw-r----- charlie charlie 3
-rw-r----- alice   admins  4
---x--x--x alice   alice   editor
---s--x--- alice   admins  editor-super
```

Unix users are **alice**, **bob** and **charlie**.

The (simplified) `id` command for each user returns:

- `id alice`: uid=1000(alice) groups=1000(alice),1003(admins)
- `id bob`: uid=1001(bob) groups=1001(bob)
- `id charlie`: uid=1002(charlie) groups=1002(charlie),1003(admins)

There are 2 executable files:

- **editor** lets you open a file with **R**ead and **W**rite capabilities;
- **editor-super** does the same as **editor**.

Draw up an access control matrix with subjects {alice, bob, charlie} and objects {1, 2, 3, 4} that shows, for *each* combination of subject and object, whether the subject will be able to read (**R**) and/or write (**W**) the respective object.