Security Supervision 1 Morgan

2.

	manual.txt	report.txt	microedit	src/code.c	src/code.h
alex	RW	<u>R</u> W*	RW*	RW*	W*
benn	R	RW+	RW	RW	W+*
cloe		RW	R	R	RW+

```
3.
```

i.

```
RDN
             foo/bar
RDN
             foo/baz
-DN
             foo/cux
-DN
             foo/dir1
RDN
             foo/dir2
             foo/dir2/flop
- - -
             foo/dir2/wibble
RDN
             foo/dir2/wobble
R--
```

ii.

```
cp -p foo/bar foo/bar_
rm -f foo/bar
mv foo/bar_ foo/bar
```

iii. Change owner, change group.

5.

a.

pos could be negative.

The table could be interfered with in-between calls.

```
int insert_in_table(int *table, int val, int pos) {
    if (pos < 0 || pos > sizeof(table) / sizeof(int)) return -1;
    table[pos] = val;
    return 0;
}
```

c. Stack canaries are (usually random) pieces of data placed in between the return address and the local variables on the stack. When a return instruction is reached, the system first checks that the stack canary is intact. This means that for a buffer overflow to successfully overwrite the return address, it has to be able to find out the value of the stack canary and make sure to only clobber it with its original value.

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Dynamic bounds checking (either built-in to the programming language or specified by the programmer) checks at every point where a buffer is being indexed, that the index is within the bounds of the buffer.