

```

File f = new File();
String s = "";
/*@ ensures finite ** call(f.open) ** finite; */
\abstract_statement A;
s = f.read();
f.write(s);
/*@ ensures finite ** call(f.close) ** finite; */
\abstract_statement B;

```

(a) Before

```

File f = new File();
String s = "";
/*@ ensures finite ** call(f.open) ** finite; */
\abstract_statement A;
f.write(s);
s = f.read();
/*@ ensures finite ** call(f.close) ** finite; */
\abstract_statement B;

```

(b) After

$$\theta ::= [\phi]$$

| call(m)

| finite

| $\theta ** \theta$