

```
1: # $Id: Makefile,v 1.3 2018-09-28 15:41:48-07 - - $
2:
3: # Note: "echo all" is echoed, but echo of "foo" and "bar" are not.
4:
5: all : foo bar
6:      echo all - command '*IS*' echoed
7:
8: foo :
9:      @ echo foo - command not echoed
10:
11: bar :
12:      @ echo bar - command not echoed
13:
```

```
1: # $Id: Makefile,v 1.1 2011-03-24 17:25:20-07 - - $
2:
3: hello : hello.c
4:         gcc hello.c -o hello
5:
6: bad : bad.c
7:         gcc bad.c -o bad
8:
9: ci : Makefile hello.c bad.c
10:        cid Makefile hello.c bad.c
11:
```

```
1: # $Id: Makefile,v 1.1 2011-03-24 17:24:59-07 - - $
2:
3: all : hello
4:
5: hello : main.o hello.o
6:         gcc main.o hello.o -o hello
7:
8: main.o : main.c hello.h
9:         gcc -c main.c
10:
11: hello.o : hello.c hello.h
12:         gcc -c hello.c
13:
14: ci : Makefile main.c hello.c hello.h
15:         cid Makefile main.c hello.c hello.h
16:
17: test : hello
18:         ./hello
19:
20: clean :
21:         - rm hello.o main.o
22:
23: spotless : clean
24:         - rm hello
25:
```

```
1: # $Id: Makefile,v 1.1 2011-03-24 17:24:36-07 - - $
2:
3: SOURCES = main.c hello.c
4: HEADERS = hello.h
5: OBJECTS = main.o hello.o
6: CHECKIN = Makefile ${SOURCES} ${HEADERS}
7: EXECBIN = hello
8:
9: all : ${EXECBIN}
10:
11: ${EXECBIN} : ${OBJECTS}
12:      gcc ${OBJECTS} -o ${EXECBIN}
13:
14: main.o : main.c hello.h
15:      gcc -c main.c
16:
17: hello.o : hello.c hello.h
18:      gcc -c hello.c
19:
20: ci : ${CHECKIN}
21:      cid ${CHECKIN}
22:
23: test : ${EXECBIN}
24:      ./${EXECBIN}
25:
26: clean :
27:      - rm ${OBJECTS}
28:
29: spotless : clean
30:      - rm ${EXECBIN}
31:
```

```
1: # $Id: Makefile,v 1.2 2015-11-03 13:44:07-08 - - $
2:
3: MKFILE    = Makefile
4: CCOPTS    = -g -O0 -Wall -Wextra
5: SOURCES   = main.c hello.c
6: HEADERS   = hello.h
7: OBJECTS   = main.o hello.o
8: CHECKIN   = ${MKFILE} ${SOURCES} ${HEADERS}
9: EXECBIN   = hello
10:
11: all : ${EXECBIN}
12:
13: ${EXECBIN} : ${OBJECTS}
14:             cc ${CCOPTS} ${OBJECTS} -o ${EXECBIN}
15:
16: %.o : %.c
17:             cc ${CCOPTS} -c $<
18:
19: ci : ${CHECKIN}
20:             cid + ${CHECKIN}
21:
22: test : ${EXECBIN}
23:             ./${EXECBIN} ; echo status = $$?
24:
25: clean :
26:             - rm ${OBJECTS}
27:
28: spotless : clean
29:             - rm ${EXECBIN}
30:
31: hello.o: hello.c hello.h
32: main.o: main.c hello.h
33:
```

```
1: # $Id: Makefile,v 1.1 2011-03-24 17:23:13-07 - - $
2:
3: MKFILE      = Makefile
4: JAVASRC     = queue.java qtest.java
5: CLASSES     = queue.class qtest.class
6: JARCLASSES  = ${CLASSES} queue\$$emptyexn.class queue\$$node.class
7: JARFILE     = qtest
8: MAINCLASS   = qtest
9: SOURCES     = ${JAVASRC} ${MKFILE}
10:
11: all : ${JARFILE}
12:
13: ${JARFILE} : ${CLASSES}
14:     echo Main-class: ${MAINCLASS} >Manifest
15:     jar cvfm ${JARFILE} Manifest ${JARCLASSES}
16:     chmod +x ${JARFILE}
17:     - rm Manifest
18:
19: %.class : %.java
20:     cid + $<
21:     javac $<
22:
23: clean :
24:     - rm ${JARCLASSES}
25:
26: spotless : clean
27:     - rm ${JARFILE}
28:
29: ci : ${SOURCES}
30:     cid + ${SOURCES}
31:
32: test : ${JARFILE}
33:     ./${JARFILE} * | cat -n
34:
```