

```
1  #! /bin/sh
2  #
3  #
4  # exercise 2a
5  MASTER=MasterList
6
7  # exercise 5a
8  GENMASTER="no"
9
10 # exercise 5d
11 DELMASTER="no"
12
13 NAMMASTER="no"
14
15 # exercise 3a
16 TMP=/tmp/$$
17 > $TMP
18
19 # exercise 5b
20 for i in "$@"
21 do
22     case "$i" in
23         -m*)    TEMPNAME=`expr "$i" : '-m\(.*\)'`
24                 if [ -z "$TEMPNAME" ]
25                 then
26                     NAMMASTER=yes
27                 else
28                     MASTER="$TEMPNAME"
29                 fi
30                 ;;
31         -g)    GENMASTER=yes    ;;
32         # next two lines are for exercise 5e
33         -d)    DELMASTER=yes    ;;
34         *)    if [ "$NAMMASTER" = yes ]
35                 then
36                     MASTER="$i"
37                     NAMMASTER=no
38                 else
39                     echo "Unknown option $i" 1>&2
40                     exit 1
41                 fi
42     esac
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42 done
43
44 if [ "$NAMMASTER" = yes ]
45 then
46     echo "You gave the -m option but no file name" 1>&2
47     exit 1
48 fi
49
50 #
51 # sanity check: only one of -d, -g
52 # exercise 5g
53 if [ "$DELMMASTER" = 'yes' -a "$GENMASTER" = 'yes' ]
54 then
55     echo "Only one of -d, -g allowed" 1>&2
56     exit 1
57 fi
58
59
60 #
61 # if delete master, do so and exit
62 # exercise 5f
63 if [ "$DELMMASTER" = 'yes' ]
64 then
65     if [ -e "$MASTER" ]
66     then
67         rm "$MASTER"
68         exit 0
69     else
70         echo "Master file does not exist; please generate it" 1>&2
71         exit 1
72     fi
73 fi
74
75 if [ "$GENMASTER"x = yesx ]
76 then
77     if [ -e "$MASTER" ]
78     then
79         echo "$MASTER exists; please delete it" 1>&2
80         exit 1
81     else
82         > "$MASTER"
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83     fi
84     #
85     for i in *
86     do
87         if [ ! -f "$i" -o "$i"x = "$MASTER"x ]
88         then
89             continue
90         fi
91         echo `ls -sail "$i"` `shasum "$i"` >> "$MASTER"
92     done
93     exit 0
94 fi
95
96 # exercise 3e
97 if [ ! -f "$MASTER" ]
98 then
99     echo "Master file does not exist; please generate it" 1>&2
100    exit 1
101 fi
102
103 for i in *
104 do
105     # exercise 3b
106     if [ "$i" = "$TMP" ]
107     then
108         continue
109     fi
110     # exercise 2c
111     if [ "$i" = "$MASTER" -o ! -f "$i" ]
112     then
113         continue
114     fi
115     # exercise 3c
116     echo `ls -sail "$i"` `shasum "$i"` >> $TMP
117 done
118
119 # exercise 3d, with the modification given in exercise 4
120 echo "Changed files:"
121 diff "$MASTER" "$TMP" | grep '^(<|>)' | awk '{ print $NF }' | sort | uniq
122 # exercise 3f
123 rm $TMP
```

124 `exit 0`

125