

```
1
2 Q1.
3
4 1)
5 padma@PRIYA:~$ ls -lt
6 total 24
7 drwxr-xr-x 6 padma padma 4096 Jul 14 21:41 exp1
8 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp2
9 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp3
10 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp4
11 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp5
12 drwx----- 3 padma padma 4096 Jul 14 21:34 snap
13 padma@PRIYA:~$ tree
14 .
15 |__ exp1
16 |   |__ ques1
17 |   |__ ques2
18 |   |__ ques3
19 |   |__ ques4
20 |__ exp2
21 |__ exp3
22 |__ exp4
23 |__ exp5
24 |__ snap
25 |   |__ tree
26 |       |__ 18
27 |       |__ common
28 |       |__ current -> 18
29
30 14 directories, 0 files
31
32 2)
33 padma@PRIYA:~$ cd exp1
34 padma@PRIYA:~/exp1$ cd ques1
35 padma@PRIYA:~/exp1/ques1$ nano new.txt
36 padma@PRIYA:~/exp1/ques1$ nano new1.txt
37 padma@PRIYA:~/exp1/ques1$ nano new2.txt
38 padma@PRIYA:~/exp1/ques1$ grep -rl "bioinformatics"
39 new.txt
40 new1.txt
41
42 3)
43 padma@PRIYA:~/exp1/ques1$ grep -r "sequence" | wc -l
44 5
45
46 Q2.
47
48 padma@PRIYA:~/exp1$ cd
49 padma@PRIYA:~$ cd exp1
50 padma@PRIYA:~/exp1$ cd ques2
51 padma@PRIYA:~/exp1/ques2$ ls -lt
52 total 12
53 -rw-r--r-- 1 padma padma 10 Jul 16 21:42 cls2.txt
54 -rw-r--r-- 1 padma padma  9 Jul 16 21:42 cls1.txt
55 -rw-r--r-- 1 padma padma  7 Jul 16 21:42 cls.txt
56 padma@PRIYA:~/exp1/ques2$ chmod 040 *.*
57 padma@PRIYA:~/exp1/ques2$ ls -lt
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58 total 12
59 ----r----- 1 padma padma 10 Jul 16 21:42 cls2.txt
60 ----r----- 1 padma padma 9 Jul 16 21:42 cls1.txt
61 ----r----- 1 padma padma 7 Jul 16 21:42 cls.txt
62
63
64
65 Q3.
66
67 padma@PRIYA:~$ ls -lt
68 total 36
69 -rw-r--r-- 1 padma padma 480 Jul 17 12:08 errorlogfile.txt
70 -rw-r--r-- 1 padma padma 55 Jul 17 12:08 errorlogfile.txt:Zone.Identifier
71 drwxr-xr-x 5 padma padma 4096 Jul 16 22:09 dept
72 drwxr-xr-x 6 padma padma 4096 Jul 14 21:41 exp1
73 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp2
74 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp3
75 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp4
76 drwxr-xr-x 2 padma padma 4096 Jul 14 21:41 exp5
77 drwx----- 3 padma padma 4096 Jul 14 21:34 snap
78
79 1)
80 padma@PRIYA:~$ grep "ERROR" errorlogfile.txt
81 2024-07-11 12:02:41 ERROR Database connection failed
82 2024-07-11 12:04:53 ERROR Failed to load configuration
83 2024-07-11 12:06:45 ERROR User authentication failed
84 2024-07-11 12:08:30 ERROR Unable to save file
85
86 2)
87 padma@PRIYA:~$ grep "ERROR" errorlogfile.txt | sort +1 -2 | cat > error_logs.txt
88 padma@PRIYA:~$ cat error_logs.txt
89 2024-07-11 12:02:41 ERROR Database connection failed
90 2024-07-11 12:04:53 ERROR Failed to load configuration
91 2024-07-11 12:06:45 ERROR User authentication failed
92 2024-07-11 12:08:30 ERROR Unable to save file
93
94 3)
95 padma@PRIYA:~$ cat errorlogfile.txt
96 2024-07-11 12:01:34 INFO User logged in
97 2024-07-11 12:02:41 ERROR Database connection failed
98 2024-07-11 12:03:12 WARNING Disk space low
99 2024-07-11 12:04:53 ERROR Failed to load configuration
100 2024-07-11 12:05:01 INFO File uploaded successfully
101 2024-07-11 12:06:45 ERROR User authentication failed
102 2024-07-11 12:07:22 INFO System shutdown initiated
103 2024-07-11 12:08:30 ERROR Unable to save file
104 2024-07-11 12:09:19 WARNING High memory usage
105 2024-07-11 12:10:10 INFO User logged out
106
107
108 Q4.
109
110 padma@PRIYA:~$ mkdir dept
111 padma@PRIYA:~$ cd dept
112 padma@PRIYA:~/dept$ mkdir fin pers mktg
113 padma@PRIYA:~/dept$ cd fin
114 padma@PRIYA:~/dept/fin$ mkdir exp inc
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115 padma@PRIYA:~/dept/fin$ cd ..
116 padma@PRIYA:~/dept$ cd pers
117 padma@PRIYA:~/dept/pers$ mkdir admin pay
118 padma@PRIYA:~/dept/pers$ cd ..
119 padma@PRIYA:~/dept$ cd fin
120 padma@PRIYA:~/dept/fin$ cd exp
121 padma@PRIYA:~/dept/fin/exp$ touch ent.txt postage.txt
122 padma@PRIYA:~/dept/fin/exp$ cd ..
123 padma@PRIYA:~/dept/fin$ cd inc
124 padma@PRIYA:~/dept/fin/inc$ touch fees.txt sales.txt
125 padma@PRIYA:~/dept/fin/inc$ cd ..
126 padma@PRIYA:~/dept/fin$ cd ..
127 padma@PRIYA:~/dept$ cd pers
128 padma@PRIYA:~/dept/pers$ cd admin
129 padma@PRIYA:~/dept/pers/admin$ touch exp.txt
130 padma@PRIYA:~/dept/pers/admin$ touch reco.txt
131 padma@PRIYA:~/dept/pers/admin$ cd ..
132 padma@PRIYA:~/dept/pers$ cd pay
133 padma@PRIYA:~/dept/pers/pay$ touch ded.txt add.txt
134 padma@PRIYA:~/dept/pers/pay$ cd
135 padma@PRIYA:~$ cd dept
136 padma@PRIYA:~/dept$ cd mktg
137 padma@PRIYA:~/dept/mktg$ touch salesinfo.txt pur.txt
138 padma@PRIYA:~/dept/mktg$ cd ..
139 padma@PRIYA:~/dept$ tree
140 .
141 └─ fin
142 │   └─ exp
143 │       └─ ent.txt
144 │       └─ postage.txt
145 │   └─ inc
146 │       └─ fees.txt
147 │       └─ sales.txt
148 └─ mktg
149 │   └─ pur.txt
150 │   └─ salesinfo.txt
151 └─ pers
152 │   └─ admin
153 │       └─ exp.txt
154 │       └─ reco.txt
155 │   └─ pay
156 │       └─ add.txt
157 │       └─ ded.txt
158 7 directories, 10 files
159
160 1)
161 padma@PRIYA:~$ cp dept/pers/pay/ded.txt dept/mktg/deduc.txt
162 padma@PRIYA:~$ ln -s $(pwd)/dept/mktg/deduc dept/pers/admin/deduc_link
163
164 2)
165 padma@PRIYA:~$ cp dept/mktg/salesinfo.txt dept//pers/pay/
166 padma@PRIYA:~$ mv dept/pers/pay/salesinfo.txt dept/fin/exp/sinfo.txt
167 padma@PRIYA:~$ cp dept/fin/exp/sinfo.txt dept/fin/
168 padma@PRIYA:~$ rm dept/fin/exp/sinfo.txt
169
170 3)
171 padma@PRIYA:~$ mv dept/fin/exp/postage.txt dept/pers/pexp.txt

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172 padma@PRIYA:~$ ln -s $(pwd)/dept/pers/pexp.txt dept/pers/pexp_link
173 padma@PRIYA:~$ rm dept/pers/pexp.txt
174
175
176 4)
177 padma@PRIYA:~$ tree dept
178 dept
179 └─ fin
180     └─ exp
181         └─ ent.txt
182     └─ inc
183         └─ fees.txt
184         └─ sales.txt
185     └─ sinfo.txt
186 └─ mktg
187     └─ deduc.txt
188     └─ pur.txt
189     └─ salesinfo.txt
190 └─ pers
191     └─ admin
192         └─ deduc_link -> /home/padma/dept/mktg/deduc
193         └─ exp.txt
194         └─ reco.txt
195     └─ pay
196         └─ add.txt
197         └─ ded.txt
198     └─ pexp_link -> /home/padma/dept/pers/pexp.txt
199
200 7 directories, 13 files
201
```