```
jasmin@ubuntu:~$ touch f{1..4}
jasmin@ubuntu:~$ echo -e "orange\napple\nbanana\napple" > f1
jasmin@ubuntu:~$ echo -e "orange\napple\ncherry\napple" > f2
jasmin@ubuntu:~$ cat f1
orange
apple
banana
apple
jasmin@ubuntu:~$ find f2
jasmin@ubuntu:~$ file f1
f1: ASCII text
jasmin@ubuntu:~$ sort f1 > f3
jasmin@ubuntu:~$ sort f2 > f4
jasmin@ubuntu:~$ cat f3
apple
apple
banana
orange
jasmin@ubuntu:~$ cmp -b f3 f4
f3 f4 differ: byte 13, line 3 is 142 b 143 c
jasmin@ubuntu:~$ sed 's/cherry/banana/g' f4 | sudo tee f4
[sudo] password for jasmin:
apple
apple
banana
orange
jasmin@ubuntu:~$ cat f4
apple
apple
banana
orange
jasmin@ubuntu:~$ diff -s f3 f4
Files f3 and f4 are identical
jasmin@ubuntu:~$ paste f3 f4 > f5
jasmin@ubuntu:~$ cat f5
apple apple
apple apple
banana banana
orange orange
jasmin@ubuntu:~$ touch f6
jasmin@ubuntu:~$ cut -b 1-6 f5 | sudo tee f6
[sudo] password for jasmin:
apple
apple
banana
orange
jasmin@ubuntu:~$ cat f6
apple
apple
banana
orange
```

```
jasmin@ubuntu:~\$ wc --words f6
4 f5
jasmin@ubuntu:~$ grep -c apple f6
jasmin@ubuntu:~\$ cat > r
1 Adore Varian
2 Nancee Merrell
3 Herta Friett
jasmin@ubuntu:~\$ cat > r1
1 New York
2 Finger Lakes
3 Tier
jasmin@ubuntu:~$ join r r1
1 Adore Varian New York
2 Nancee Merrell Finger Lakes
3 Herta Friett Tier
jasmin@ubuntu:~$ od r
0000000 020061 062101 071157 020145 060526 064562 067141 031012
0000020 047040 067141 062543 020145 062515 071162 066145 005154
0000040 020063 062510 072162 020141 071106 062551 072164 000012
0000057
jasmin@ubuntu:~$ df
Filesystem
            1K-blocks
                         Used Available Use% Mounted on
udev
            1967912
                         0 1967912 0%/dev
tmpfs
            399508
                     1824 397684 1% /run
/dev/sda5
             25152772 12592452 11259584 53% /
            1997540
                         0 1997540 0% /dev/shm
tmpfs
tmpfs
              5120
                            5116 1% /run/lock
tmpfs
            1997540
                         0 1997540 0%/sys/fs/cgroup
/dev/loop0
                128
                       128
                                0 100% /snap/bare/5
/dev/loop1
               56832
                       56832
                                  0 100% /snap/core18/2253
/dev/loop2
               56960 56960
                                  0 100% /snap/core18/2284
/dev/loop4
              224256 224256
                                   0 100% /snap/gnome-3-34-1804/72
jasmin@ubuntu:~$ mktemp
/tmp/tmp.IuGhU9f4km
jasmin@ubuntu:~$ du
4
       ./.mozilla/firefox/Crash Reports/events
24
      ./.mozilla/firefox/Crash Reports
4
      ./.mozilla/firefox/Pending Pings
8
      ./.mozilla/firefox/sgwv0mh7.default
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/archived/2022-02
268
272
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/archived
4
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/glean/events
4
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/glean/pending pings
4
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/glean/tmp
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/glean/db
12
28
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting/glean
504
      ./.mozilla/firefox/wmcu6srk.default-release/datareporting
1360
      ./.mozilla/firefox/wmcu6srk.default-release/gmp-gmpopenh264/1.8.1.1
      ./.mozilla/firefox/wmcu6srk.default-release/gmp-gmpopenh264
1364
4
      ./.mozilla/firefox/wmcu6srk.default-release/crashes/events
12
      ./.mozilla/firefox/wmcu6srk.default-release/crashes
```

```
16
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++allcalc.ru/ls
24
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++allcalc.ru
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++binary2hex.ru/ls
16
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++binary2hex.ru
24
4
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https++
+losst.ru/idb/993782502OBNDE KSDISG NLA.files
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++losst.ru/idb
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++losst.ru/ls
20
       ./.mozilla/firefox/wmcu6srk.default-release/storage/default/https+++losst.ru
80
jasmin@ubuntu:~\$ cat > 1.c
int main(void)
long long x;
long long c;
int a;
int b = 0;
while (scanf("\%lld", \&x) != EOF) {
for (int i = 0; i \le 9; i++) {
c = abs(x);
while (c > 0) {
a = c \% 10;
c = c / 10;
if (a == i) {
b = b + 1;
break;
if (b == 10) {
printf("False\n");
} else {
printf("True\n");
return 0;
jasmin@ubuntu:~$ indent -kr 1.c
jasmin@ubuntu:~$ cat 1.c
int main(void)
  long long x;
  long long c;
  int a;
  int b = 0;
  while (scanf("\%lld", \&x) != EOF) {
       b = 0:
       for (int i = 0; i \le 9; i++) {
          c = abs(x);
          while (c > 0) {
               a = c \% 10;
               c = c / 10;
```

```
if (a == i) {
                b = b + 1;
                break;
         }
      if (b == 10) {
         printf("False\n");
       } else {
         printf("True\n");
  return 0;
jasmin@ubuntu:~$ md5sum 1.c
784f6995c120adda24fa84df273812b6 1.c
jasmin@ubuntu:~$ touch f1 f2
jasmin@ubuntu:~$ echo -e "apple\nbanana" > f1
jasmin@ubuntu:~$ echo -e "apple\ncherry" > f2
jasmin@ubuntu:~$ comm f1 f2
              apple
banana
      cherry
```