CSE Hands-On 6 20161218

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Question1: Are the balances in ./tmp/a and ./tmp/b equal?

- Yes, the balances in these two files are the same.

Question2: The clients are printing error messages. Wha...?

- The error messages mean that the set(result) is not equal to one, because the sever sends more than one. The reason for this problem is that you ran with two clients to the server. So the both will respond with a piece of result. Then in the result list, you will find more than one pair.

Question3: We have given you the skeleton of the co...?

- coord.py

```
for rep in replicas:
    fd = socket.create_connection(('localhost', str(rep)))
    fd.send(msg)
    resp = fd.recv(4096)
    replies.append(resp)
conn.send(replies[0])
conn.close()
```

Question4: Modify the coordinator (and srv.py) so tha...?

- coord.py

```
ts = strftime("# %a, %d %b %Y %H:%M:%S +0000\n", gmtime())
for rep in replicas:
    fd = socket.create_connection(('localhost', str(rep)))
    fd.send("%s %s" % (msg, ts))
    resp = fd.recv(4096)
    replies.append(resp)
conn.send(replies[0])
conn.close()
```

- srv.py

```
def writefile(fn, s, ts):
    with open(fn, 'w') as f:
    f.write(ts)
    for k in sorted(s):
        f.write('%s %d\n' % (k, s[k]))
s = setup()
while True:
    conn, addr = s.accept()
    msg = conn.recv(4096)
    a = None
```

```
    try:
        a, b, amts, ts = msg.split(' ', 3)
        amt = int(amts)
    except:
        pass
    if a is not None:
        state = readfile(datafile)
        ra, rb = xfer(a, b, amt)
        writefile(datafile, state, ts)
        # print '%s %s %d -> %d %d' % (a, b, amt, ra, rb)
        conn.send("%d %d" % (ra, rb))
    conn.close()
```