

- The red rectangle depicts a depositor agent inserting money into JA-1. The blue rectangle shows a withdrawal agent taking money away from JA-1. The yellow rectangle exhibits both accounts being locked in order to transfer money from one account to the other. The purple rectangle shows withdrawal agent being blocked, and once money is deposited in transaction #111, it becomes free and is able to withdraw again.

253	Agent DT0 deposits \$196.00 into: JA-1	(+) JA-1 balance is: \$210.00	99
254	Agent WT7 withdraws \$47.00 from JA-1	(-) JA-1 balance is: \$163.00	100
255	Agent WT0 withdraws \$35.00 from JA-1	(-) JA-1 balance is: \$128.00	101
256	Agent WT4 withdraws \$18.00 from JA-2	(-) JA-2 balance is: \$358.00	102
257	Agent WT2 withdraws \$88.00 from JA-1	(-) JA-1 balance is: \$40.00	103
258	Agent DT2 deposits \$18.00 into: JA-2	(+) JA-2 balance is: \$376.00	104
259	Agent WT0 withdraws \$32.00 from JA-2	(-) JA-2 balance is: \$344.00	105
260	TRANSFER --> Agent TR0 transferring \$53.00 from JA-2 to JA-1 - - JA-2 balance is now \$291.00		106
261	TRANSFER COMPLETE --> Account JA-1 balance is now \$93.00		
262			
263	Agent WT7 withdraws \$21.00 from JA-1	(-) JA-1 balance is: \$72.00	107
264	Agent WT6 attempts to withdraw \$99.00 from JA-1 (****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$72.00		
265	Agent WT1 withdraws \$86.00 from JA-2	(-) JA-2 balance is: \$205.00	108
266	Agent WT3 withdraws \$43.00 from JA-1	(-) JA-1 balance is: \$29.00	109
267	Agent WT0 withdraws \$18.00 from JA-2	(-) JA-2 balance is: \$187.00	110
268	Agent DT3 deposits \$129.00 into: JA-1	(+) JA-1 balance is: \$158.00	111
269	Agent WT5 withdraws \$12.00 from JA-2	(-) JA-2 balance is: \$175.00	112
270	Agent WT8 withdraws \$32.00 from JA-2	(-) JA-2 balance is: \$143.00	113
271	Agent WT6 withdraws \$96.00 from JA-1	(-) JA-1 balance is: \$62.00	114

- The images below show flagged transactions being recorded in both the text file of the bank transactions simulator and accurately recorded in the flagged transactions logs.

Agent DT0 deposits \$305.00 into: JA-2	(+) JA-2 balance is: \$305.00	362
Agent WT1 attempts to withdraw \$40.00 from JA-1 (*****)	WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$3.00	
Agent WT7 attempts to withdraw \$27.00 from JA-1 (*****)	WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$3.00	
Agent DT3 deposits \$564.00 into: JA-1	(+) JA-1 balance is: \$567.00	363
Flagged Transaction Agent DT3 Made A Deposit In Excess Of \$450.00 USD - See Flagged Transaction Log.		
Agent WT4 withdraws \$64.00 from JA-1	(-) JA-1 balance is: \$503.00	364
Agent WT0 withdraws \$95.00 from JA-2	(-) JA-2 balance is: \$210.00	365
Flagged Transaction Agent WT0 Made A Withdrawal In Excess Of \$90.00 USD - See Flagged Transaction Log.		
Agent DT2 deposits \$543.00 into: JA-1	(+) JA-1 balance is: \$1,046.00	366
Flagged Transaction Agent DT2 Made A Deposit In Excess Of \$450.00 USD - See Flagged Transaction Log.		
Agent WT7 withdraws \$24.00 from JA-1	(-) JA-1 balance is: \$1,022.00	367
Agent WT1 withdraws \$46.00 from JA-1	(-) JA-1 balance is: \$976.00	368
Agent WT6 withdraws \$48.00 from JA-2	(-) JA-2 balance is: \$162.00	369

40	Agent WT9 issued withdrawal of \$95.00 at: 9/22/24 7:16:26 PM EDT	Transaction Number: 326
41	Agent DT4 issued deposit of \$513.00 at: 9/22/24 7:16:26 PM EDT	Transaction Number: 338
42	Agent WT8 issued withdrawal of \$97.00 at: 9/22/24 7:16:26 PM EDT	Transaction Number: 340
43	Agent DT3 issued deposit of \$564.00 at: 9/22/24 7:16:27 PM EDT	Transaction Number: 363
44	Agent WT0 issued withdrawal of \$95.00 at: 9/22/24 7:16:27 PM EDT	Transaction Number: 365
45	Agent DT2 issued deposit of \$543.00 at: 9/22/24 7:16:27 PM EDT	Transaction Number: 366
46	Agent WT8 issued withdrawal of \$91.00 at: 9/22/24 7:16:27 PM EDT	Transaction Number: 370
47	Agent WT5 issued withdrawal of \$94.00 at: 9/22/24 7:16:27 PM EDT	Transaction Number: 380

- The images below show the first two internal bank audits showing the accurate number of transactions and balances between the time it took each one to perform

- Similarly as above but with the US department of the treasury audit

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1461 Agent WT3 attempts to withdraw $25.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $6.00
1462 Agent WT9 attempts to withdraw $28.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $6.00
1463 Agent WT1 withdraws $40.00 from JA-1 (-) JA-1 balance is: $200.00 621
1464
1465
1466 *****
1467
1468
1469 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Beginning...
1470
1471 The total number of transactions since the last Treasury Department audit is: 114
1472
1473 TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $200.00
1474 TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $6.00
1475
1476
1477 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Terminated...
1478
1479
1480 *****
1481
1482
1483 Agent WT0 attempts to withdraw $59.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $6.00
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1602 Agent WT6 attempts to withdraw $35.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $10.00
1603 Agent WT2 withdraws $98.00 from JA-2 (-) JA-2 balance is: $874.00 667
1604
1605
1606 ***Flagged Transaction*** Agent WT2 Made A Withdrawal In Excess Of $90.00 USD - See Flagged Transaction Log.
1607
1608
1609
1610 *****
1611
1612
1613 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Beginning...
1614
1615 The total number of transactions since the last Treasury Department audit is: 46
1616
1617 TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $10.00
1618 TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $874.00
1619
1620
1621 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Terminated...
1622
1623
1624 *****
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- The images below show the internal and US department of the treasury audit not being related and executing on different time intervals. They have different balances.

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1178 *****
1179
1180
1181 Internal Bank Audit Beginning...
1182
1183     The total number of transactions since the last Internal audit is: 120
1184
1185     INTERNAL BANK AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $2.00
1186     INTERNAL BANK AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $36.00
1187
1188
1189 Internal Bank Audit Complete
1190
1191 *****
1192
1193
1194
1195 Agent DT1 deposits $355.00 into: JA-1                (+) JA-1 balance is: $357.00                490
1196 Agent DT4 deposits $410.00 into: JA-1                (+) JA-1 balance is: $767.00                491
1197     Agent WT5 attempts to withdraw $73.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $36.00
1198     Agent WT8 withdraws $20.00 from JA-1              (-) JA-1 balance is: $747.00                492
1199     Agent WT4 withdraws $48.00 from JA-1              (-) JA-1 balance is: $699.00                493
1200     Agent WT7 withdraws $30.00 from JA-1              (-) JA-1 balance is: $669.00                494
1201     Agent WT3 withdraws $62.00 from JA-1              (-) JA-1 balance is: $607.00                495
1202     Agent WT3 attempts to withdraw $47.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $36.00
1203     Agent WT2 withdraws $76.00 from JA-1              (-) JA-1 balance is: $531.00                496
1204     Agent WT7 withdraws $31.00 from JA-1              (-) JA-1 balance is: $500.00                497
1205     Agent WT6 attempts to withdraw $47.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $36.00
1206     Agent WT4 withdraws $3.00 from JA-2               (-) JA-2 balance is: $33.00                498
1207     Agent WT2 attempts to withdraw $76.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $33.00
1208     Agent WT1 attempts to withdraw $59.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $33.00
1209     Agent WT9 attempts to withdraw $92.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $33.00
1210 Agent DT0 deposits $41.00 into: JA-2                (+) JA-2 balance is: $74.00                499
1211     Agent WT3 withdraws $15.00 from JA-2              (-) JA-2 balance is: $59.00                500
1212     Agent WT8 withdraws $10.00 from JA-1              (-) JA-1 balance is: $490.00                501
1213     Agent WT7 withdraws $17.00 from JA-1              (-) JA-1 balance is: $473.00                502
1214     Agent WT9 withdraws $60.00 from JA-1              (-) JA-1 balance is: $413.00                503
1215     Agent WT4 withdraws $73.00 from JA-1              (-) JA-1 balance is: $340.00                504
1216     Agent WT8 withdraws $43.00 from JA-2              (-) JA-2 balance is: $16.00                505
1217     Agent WT8 withdraws $14.00 from JA-2              (-) JA-2 balance is: $2.00                506
1218     Agent WT1 withdraws $57.00 from JA-1              (-) JA-1 balance is: $283.00                507

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1218     Agent WT1 withdraws $57.00 from JA-1              (-) JA-1 balance is: $283.00                507
1219     Agent WT0 attempts to withdraw $86.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $2.00
1220
1221
1222 *****
1223
1224
1225 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Beginning...
1226
1227     The total number of transactions since the last Treasury Department audit is: 225
1228
1229     TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-1 TO BE: $283.00
1230     TREASURY DEPT AUDITOR FINDS CURRENT ACCOUNT BALANCE FOR JA-2 TO BE: $2.00
1231
1232
1233 UNITED STATES DEPARTMENT OF THE TREASURY - Bank Audit Terminated...
1234
1235 *****
1236
1237
1238
1239     Agent WT8 attempts to withdraw $54.00 from JA-2 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only $2.00
1240     Agent WT1 withdraws $26.00 from JA-1              (-) JA-1 balance is: $257.00                508

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- The image below shows both accounts constantly decreasing overtime

151		Agent WT4 withdraws \$47.00 from JA-2	(-) JA-2 balance is: \$798.00	55
152	Agent DT0 deposits \$169.00 into: JA-1		(+) JA-1 balance is: \$376.00	56
153		Agent WT4 withdraws \$6.00 from JA-1	(-) JA-1 balance is: \$370.00	57
154		Agent WT6 withdraws \$19.00 from JA-2	(-) JA-2 balance is: \$779.00	58
155		Agent WT5 withdraws \$6.00 from JA-1	(-) JA-1 balance is: \$364.00	59
156		Agent WT2 withdraws \$66.00 from JA-1	(-) JA-1 balance is: \$298.00	60
157		Agent WT1 withdraws \$59.00 from JA-1	(-) JA-1 balance is: \$239.00	61
158		Agent WT7 withdraws \$91.00 from JA-1	(-) JA-1 balance is: \$148.00	62
159				
160				
161	***Flagged Transaction*** Agent WT7 Made A Withdrawal In Excess Of \$90.00 USD - See Flagged Transaction Log.			
162				
163		Agent WT0 withdraws \$76.00 from JA-2	(-) JA-2 balance is: \$703.00	63
164		Agent WT9 withdraws \$28.00 from JA-2	(-) JA-2 balance is: \$675.00	64
165		Agent WT1 withdraws \$19.00 from JA-2	(-) JA-2 balance is: \$656.00	65
166		Agent WT9 withdraws \$61.00 from JA-2	(-) JA-2 balance is: \$595.00	66
167		Agent WT3 withdraws \$83.00 from JA-2	(-) JA-2 balance is: \$512.00	67
168		Agent WT9 withdraws \$8.00 from JA-1	(-) JA-1 balance is: \$140.00	68
169		Agent WT4 withdraws \$16.00 from JA-2	(-) JA-2 balance is: \$496.00	69
170		Agent WT4 withdraws \$73.00 from JA-2	(-) JA-2 balance is: \$423.00	70
171		Agent WT8 withdraws \$78.00 from JA-1	(-) JA-1 balance is: \$62.00	71
172		Agent WT2 withdraws \$86.00 from JA-2	(-) JA-2 balance is: \$337.00	72
173		Agent WT3 withdraws \$81.00 from JA-2	(-) JA-2 balance is: \$256.00	73
174		Agent WT5 withdraws \$68.00 from JA-2	(-) JA-2 balance is: \$188.00	74
175		Agent WT2 withdraws \$35.00 from JA-1	(-) JA-1 balance is: \$27.00	75
176		Agent WT6 withdraws \$47.00 from JA-2	(-) JA-2 balance is: \$141.00	76
177		Agent WT1 withdraws \$24.00 from JA-2	(-) JA-2 balance is: \$117.00	77
178		Agent WT7 attempts to withdraw \$37.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$27.00	
179		Agent WT0 attempts to withdraw \$57.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$27.00	
180		Agent WT1 withdraws \$57.00 from JA-2	(-) JA-2 balance is: \$60.00	78
181		Agent WT9 attempts to withdraw \$75.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$27.00	
182	Agent DT1 deposits \$54.00 into: JA-1		(+) JA-1 balance is: \$81.00	79
183		Agent WT1 withdraws \$48.00 from JA-2	(-) JA-2 balance is: \$12.00	80
184		Agent WT5 withdraws \$71.00 from JA-1	(-) JA-1 balance is: \$10.00	81
185		Agent WT4 attempts to withdraw \$71.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
186		Agent WT8 attempts to withdraw \$82.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
187		Agent WT9 attempts to withdraw \$43.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
188		Agent WT2 attempts to withdraw \$90.00 from JA-2	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$12.00	
189		Agent WT6 attempts to withdraw \$39.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
190		Agent WT3 withdraws \$4.00 from JA-2	(-) JA-2 balance is: \$8.00	82
191		Agent WT3 attempts to withdraw \$59.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
192		Agent WT1 attempts to withdraw \$54.00 from JA-2	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$8.00	
193		Agent WT0 attempts to withdraw \$62.00 from JA-1	(****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
194		Agent WT7 withdraws \$8.00 from JA-2	(-) JA-2 balance is: \$0.00	83

- The image below shows how the program produced more than 750 transaction lines

2609							Agent WT0 attempts to withdraw \$75.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$45.00	
2610							Agent WT6 attempts to withdraw \$79.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$45.00	
2611							Agent WT8 withdraws \$98.00 from JA-2 (-) JA-2 balance is: \$756.00	1137
2612								
2613								
2614							***Flagged Transaction*** Agent WT8 Made A Withdrawal In Excess Of \$90.00 USD - See Flagged Transaction Log.	
2615								
2616							Agent WT8 withdraws \$35.00 from JA-1 (-) JA-1 balance is: \$10.00	1138
2617							Agent WT9 attempts to withdraw \$72.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
2618							Agent WT7 attempts to withdraw \$23.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
2619							Agent WT2 attempts to withdraw \$93.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
2620							Agent WT8 withdraws \$38.00 from JA-2 (-) JA-2 balance is: \$718.00	1139
2621							Agent WT4 withdraws \$17.00 from JA-2 (-) JA-2 balance is: \$701.00	1140
2622							Agent WT1 attempts to withdraw \$19.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
2623							Agent WT5 withdraws \$17.00 from JA-2 (-) JA-2 balance is: \$684.00	1141
2624							Agent WT4 withdraws \$85.00 from JA-2 (-) JA-2 balance is: \$599.00	1142
2625							Agent WT3 attempts to withdraw \$17.00 from JA-1 (*****) WITHDRAWAL BLOCKED - INSUFFICIENT FUNDS!!!! Balance only \$10.00	
2626							TRANSFER --> Agent TR1 transferring \$316.00 from JA-2 to JA-1 - - JA-2 balance is now \$283.00	1143
2627							TRANSFER COMPLETE --> Account JA-1 balance is now \$326.00	
2628								
2629							Agent WT4 withdraws \$11.00 from JA-2 (-) JA-2 balance is: \$272.00	1144
2630							Agent WT8 withdraws \$25.00 from JA-2 (-) JA-2 balance is: \$247.00	1145
2631							Agent WT5 withdraws \$31.00 from JA-2 (-) JA-2 balance is: \$216.00	1146
2632							Agent WT8 withdraws \$94.00 from JA-1 (-) JA-1 balance is: \$232.00	1147
2633								
2634								
2635							***Flagged Transaction*** Agent WT8 Made A Withdrawal In Excess Of \$90.00 USD - See Flagged Transaction Log.	
2636								
2637							Agent WT4 withdraws \$90.00 from JA-1 (-) JA-1 balance is: \$142.00	1148
2638								
2639								
2640							***Flagged Transaction*** Agent WT4 Made A Withdrawal In Excess Of \$90.00 USD - See Flagged Transaction Log.	
2641								
2642							Agent WT8 withdraws \$54.00 from JA-1 (-) JA-1 balance is: \$88.00	1149
2643							Agent DT1 deposits \$272.00 into: JA-1 (+) JA-1 balance is: \$360.00	1150
2644							Agent WT0 withdraws \$71.00 from JA-1 (-) JA-1 balance is: \$289.00	1151
2645							Agent WT5 withdraws \$82.00 from JA-1 (-) JA-1 balance is: \$207.00	1152
2646							Agent WT2 withdraws \$46.00 from JA-2 (-) JA-2 balance is: \$170.00	1153
2647							Agent WT6 withdraws \$12.00 from JA-1 (-) JA-1 balance is: \$195.00	1154
2648							Agent WT1 withdraws \$58.00 from JA-1 (-) JA-1 balance is: \$137.00	1155
2649							Agent WT0 withdraws \$72.00 from JA-2 (-) JA-2 balance is: \$98.00	1156
2650							Agent WT3 withdraws \$37.00 from JA-1 (-) JA-1 balance is: \$100.00	1157
2651							Agent WT7 withdraws \$25.00 from JA-2 (-) JA-2 balance is: \$73.00	1158