# Statement coverage - transfer method

| Test<br>Case<br>ID | is_adm<br>in | amount | account_num<br>_from | account_nu<br>m_to | Expected output   |
|--------------------|--------------|--------|----------------------|--------------------|---|
| TC1                | True         | 200    | 00001                | 12345              | Should succeed<br>(despite 12345<br>being disabled –<br>depends on logic) |
| TC2                | True         | 1500   | 00001                | 12345              | Fails: logs<br>"Balance Violation<br>Error"                               |
| тсз                | True         | 500    | 999                  | 12345              | Fails: logs "Account does not exist"                                      |
| TC4                | False        | 1500   | 00001                | 12345              | Fails: logs<br>"Transfer Limit<br>Violation"                              |
| TC5                | False        | 1300   | 00001                | 12345              | Fails: logs "Balance Violation Error"                                     |
| TC6                | False        | 300    | 00001                | 12345              | Should succeed  |
| TC7                | False        | 500    | 999                  | 00001              | Fails: logs<br>"Account does not<br>exist"                                |

## Loop coverage - Withdrawal method

| Test ID case | How many<br>times loop<br>runs | account_num | Expected output                             |
|--------------|--------------------------------|-------------|---|
| LC1          | 0                              |             | Nothing is happening because no account was |

|     |   |       | provided   |
|-----|---|-------|--|
| LC2 | 1 | 00001 | Loop runs once<br>when the first<br>account in txt file<br>matches |
| LC3 | 2 | 12345 | Loop runs once when the twice account in txt file matches          |
| LC4 | 3 | 00002 | Loop runs many<br>times when account<br>in txt file matches        |

# **Decision coverage - Withdrawal method**

#### DC1 - if self.is\_admin

| Test Case ID | amount | account_num | is_admin | Expected<br>Result            |  |  |
|--------------|--------|-------------|----------|-------------------------------|--|--|
| DC1-True     | 100    | 00001       | True     | Admin path taken → success    |  |  |
| DC1-False    | 100    | 00001       | False    | Standard path taken → success |  |  |

## DC2 - if int(x['account\_number']) == self.account\_num

| Test Case ID | amount | account_num | is_admin | Expected<br>Result                  |
|--------------|--------|-------------|----------|-------------------------------------|
| DC2-True     | 100    | 00001       | True     | Account found  → withdrawal allowed |

| DC2-False | 100 | 999 | True | Account not   |
|-----------|-----|-----|------|---------------|
|           |     |     |      | found → logs  |
|           |     |     |      | "Account does |
|           |     |     |      | not exist"    |

#### DC3 - if int(x['account\_number']) == self.account\_num

| Test Case ID | amount | account_num | is_admin | Expected<br>Result                                |
|--------------|--------|-------------|----------|---|
| DC3-True     | 100    | 00001       | False    | Account found  → withdrawal allowed               |
| DC3-False    | 100    | 999         | False    | Account not found → logs "Account does not exist" |

#### DC4 - if self.amount > 1000

| Test Case ID | amount | account_num | is_admin | Expected<br>Result                      |
|--------------|--------|-------------|----------|---|
| DC4-True     | 1500   | 00001       | False    | Logs<br>"Withdrawal<br>Limit Violation" |
| DC4-False    | 500    | 0001        | False    | Under limit → continue                  |

#### DC5 - if self.amount > balance

| Test Case ID | amount | account_num | is_admin | Expected<br>Result                |
|--------------|--------|-------------|----------|-----------------------------------|
| DC5-True     | 1500   | 00001       | True     | Logs "Balance<br>Violation Error" |

| DC5-False | 300 | 00001 | True | Sufficient |
|-----------|-----|-------|------|------------|
|           |     |       |      | balance →  |
|           |     |       |      | withdrawal |
|           |     |       |      | allowed    |