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1. Write a PL/SQL code block that will accept an account number from the user and debit an amount of Rs. 2000 from the account if the account has a minimum balance of Rs. 500 after the amount is debited. The process is to be fired on the Account table.
Table Name: Accounts

Account_Id	Name	Balance
AC 001	A	5000
AC 002	B	10000
AC 003	D	5000
AC 004	E	2000
AC 005	C	250

```
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE DebitFromAccount(IN account_no VARCHAR(24))
    ->
    -> BEGIN
    ->
    ->     DECLARE b_balance FLOAT;
    ->
    ->
    ->
    ->     -- Check if the account exists and retrieve its balance
    ->
    ->     SELECT Balance INTO b_balance
    ->
    ->     FROM Accounts
    ->
    ->     WHERE Account_Id = account_no;
    ->
    ->
    ->
    ->     -- Debit Rs. 2000 if the account has a minimum balance of Rs. 500 after the debit
    ->
    ->     IF b_balance >= 2500 THEN
    ->
    ->         UPDATE Accounts
    ->
    ->         SET Balance = Balance - 2000
    ->
    ->         WHERE Account_Id = account_no;
    ->
    ->
    ->
    ->         SELECT 'Rs. 2000 debited successfully from account ' AS Message, balance from Accounts where Account_Id = account_no;
    ->
    ->     ELSE
    ->
    ->         SELECT 'Insufficient balance to perform the transaction.' AS Message;
    ->
    ->     END IF;
```

```
    ->
    -> END //
Query OK, 0 rows affected (0.02 sec)

mysql> call DebitFromAccount('ACC 001') //
+-------------------------------------------+---------+
| Message                                   | balance |
+-------------------------------------------+---------+
| Rs. 2000 debited successfully from account |    1000 |
+-------------------------------------------+---------+
1 row in set (0.05 sec)

Query OK, 0 rows affected (0.05 sec)

mysql> call DebitFromAccount('ACC 005') //
+-----------------------------------------------+
| Message                                       |
+-----------------------------------------------+
| Insufficient balance to perform the transaction. |
+-----------------------------------------------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

2. Write a PL/SQL code block that will check both the account numbers and names before transferring an amount from one account to another. Ensure proper error handling to manage scenarios

```
mysql> DELIMITER //
mysql>
mysql>
mysql> CREATE PROCEDURE TransferAmount(
    ->
    ->     IN p_sender_id VARCHAR(20),
    ->
    ->     IN p_receiver_id VARCHAR(20),
    ->
    ->     IN p_receiver_name varchar(5),
    ->
    ->     IN p_transfer_amount FLOAT
    ->
    -> )
    ->
    -> BEGIN
    ->
    ->     DECLARE v_sender_balance FLOAT;
    ->
    ->     DECLARE v_receiver_balance FLOAT;
    ->
    ->
    ->
    ->     -- Check if sender and receiver accounts exist and retrieve their balances
    ->
    ->     SELECT Balance INTO v_sender_balance
    ->
    ->     FROM Accounts
    ->
    ->     WHERE Account_Id = p_sender_id;
    ->
    ->
    ->
    ->     SELECT Balance INTO v_receiver_balance
    ->
    ->     FROM Accounts
    ->
    ->     WHERE Account_Id = p_receiver_id and Name = p_receiver_name;
    ->
```

```
    ->        IF v_sender_balance IS NOT NULL AND v_receiver_balance IS NOT NULL THEN
    ->              -- Transfer amount if sender has sufficient balance
    ->
    ->            IF v_sender_balance >= p_transfer_amount THEN
    ->
    ->
    ->
    ->                UPDATE Accounts
    ->
    ->                SET Balance = Balance - p_transfer_amount
    ->
    ->                WHERE Account_Id = p_sender_id;
    ->
    ->
    ->
    ->                -- Credit to receiver
    ->
    ->                UPDATE Accounts
    ->
    ->                SET Balance = Balance + p_transfer_amount
    ->
    ->                WHERE Account_Id = p_receiver_id;
    ->
    ->
    ->
    ->                SELECT 'Transfer of Rs. ', p_transfer_amount, ' from account ', p_sender_id, ' to account
    ->
    ->            ELSE
    ->
    ->                SIGNAL SQLSTATE '45000'
    ->
    ->                SET MESSAGE_TEXT = 'Insufficient balance in account ' ;
    ->
    ->            END IF;
    ->
    ->        ELSE
    ->
    ->            SIGNAL SQLSTATE '45000'
    ->
    ->            SET MESSAGE_TEXT = 'Invalid account number or name.';
    ->
    ->        END IF;
    ->
    ->
    -> END //
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> call TransferAmount('ACC 002','ACC 005','C',1000) //
+-----------------+-------------------+--------------+-------------+------------+----------------+----------------+
| Transfer of Rs. | p_transfer_amount | from account | p_sender_id | to account | p_receiver_id  | Message        |
+-----------------+-------------------+--------------+-------------+------------+----------------+----------------+
| Transfer of Rs. |              1000 | from account | ACC 002     | to account | ACC 005        | successful.    |
+-----------------+-------------------+--------------+-------------+------------+----------------+----------------+
1 row in set (0.05 sec)

Query OK, 0 rows affected (0.05 sec)
```

2. Write a PL/SQL code block that will check both the account numbers
and names before transferring an amount from one account to another.
Ensure proper error handling to manage scenarios