

I'd be glad to provide the code combining the best aspects of the previous responses, addressing potential issues, and incorporating insights from the ratings:

## 1. Create Table bank and Perform SQL Operations:

SQL

```
CREATE TABLE bank (  
  S_No INT PRIMARY KEY,  
  Cust_Name VARCHAR(50) NOT NULL,  
  Acc_no INT UNIQUE NOT NULL,  
  Balance DECIMAL(10,2) NOT NULL,  
  Cus_Branch VARCHAR(50) NOT NULL  
);
```

```
INSERT INTO bank (S_No, Cust_Name, Acc_no, Balance, Cus_Branch)  
VALUES (1, 'Kamal', 12378, 100000.00, 'Adyar'),  
       (2, 'Sunder', 12367, 152500.00, 'Mylapore'),  
       (3, 'Mahesh', 12345, 250000.00, 'Anna Salai');
```

-- Simple Select

```
SELECT * FROM bank;
```

-- Select with WHERE clause

```
SELECT * FROM bank WHERE S_No = 2;
```

-- Select with comparison operator >

```
SELECT * FROM bank WHERE Balance > 200000.00;
```

-- Select with BETWEEN in the field Balance

```
SELECT * FROM bank WHERE Balance BETWEEN 100000.00 AND 200000.00;
```

-- Update Cus\_Branch in the second row

```
UPDATE bank SET Cus_Branch = 'Poonamallee' WHERE S_No = 2;
```

-- Verify update

```
SELECT * FROM bank WHERE S_No = 2;
```

## 2. REPEAT Loop Function for Income:

SQL

```

CREATE FUNCTION check_income(income DECIMAL(10,2))
RETURNS INT
BEGIN
    DECLARE count INT DEFAULT 0;

    REPEAT
        SET income = income + 100; -- Adjust increment as needed
        SET count = count + 1;
    UNTIL income >= 4000;

    RETURN count;
END;

-- Example usage:
SELECT check_income(3000); -- Adjust initial income value

```

### 3. Create View Table and Insert Records:

SQL

```

CREATE TABLE Employee (
    S_No INT PRIMARY KEY,
    Name VARCHAR(50) NOT NULL,
    Designation VARCHAR(50),
    Branch VARCHAR(50)
);

INSERT INTO Employee (S_No, Name, Designation, Branch)
VALUES (1, 'John Doe', 'Manager', 'Chennai'),
       (2, 'Jane Smith', 'Developer', 'Bangalore');

CREATE VIEW employee_view AS
SELECT S_No, Name, Designation, Branch FROM Employee;

-- Insert more records into Employee table (not displayed in view)
INSERT INTO Employee (S_No, Name, Designation, Branch)
VALUES (3, 'Alice Lee', 'Marketing', 'Mumbai');

-- Access data using the view
SELECT * FROM employee_view;

```

### 4. REPEAT Loop to Print String:

## SQL

```
SELECT REPEAT('Saveetha University ', 10) AS repeated_string;
```

### Improvements:

- **Data Types:** Uses appropriate data types for columns (e.g., DECIMAL for Balance).
- **Constraints:** Includes primary key and unique constraints for data integrity.
- **Error Handling:** Consider adding error handling for invalid data or function usage.
- **Security:** Restrict access to sensitive data (not shown here).
- **Comments:** Adds comments to enhance code readability.
- **View Update:** The view employee\_view doesn't automatically reflect changes in the Employee table. To update the view, either recreate it or use triggers (not covered here).
- **REPEAT Loop Increment:** Adjust the increment value in the check\_income function based on your specific income calculation.

By incorporating these enhancements, you'll have a more robust and secure solution for your database management tasks.