

This trigger will maintain the derived attribute *total_loan* in the *bank_branch* table. This file is called in *load.sql* right before the values are inserted into the *loan* table. It is triggered whenever the *amount* column of *bank_branch* is updated or has a deletion or an insertion, which causes the *total_loan* to be updated with the correct total.

```
CREATE OR REPLACE TRIGGER tot_loan_trig1
BEFORE INSERT OR UPDATE OR DELETE OF amount ON loan
FOR EACH ROW
BEGIN
    IF INSERTING THEN
        UPDATE bank_branch
            SET total_loan = total_loan + :NEW.amount
            WHERE bank_branch.branchno = :NEW.branchno;
    ELSIF UPDATING THEN
        UPDATE bank_branch
            SET total_loan = total_loan + :NEW.amount - :OLD.amount
            WHERE bank_branch.branchno = :OLD.branchno;
    ELSE -- deleting
        UPDATE bank_branch
            SET total_loan = total_loan - :OLD.amount
            WHERE bank_branch.branchno = :OLD.branchno;
    END IF;
END;
/
```