

Qn2.

```
CREATE OR REPLACE FUNCTION checkMaximumWorkHours() RETURNS
TRIGGER
AS $$
DECLARE
    projectBudget    INTEGER ;
    currentTotalHours INTEGER ;
BEGIN
    IF (TG_OP = 'INSERT') OR (TG_OP = 'UPDATE') THEN
        SELECT pbudget INTO projectBudget
        FROM   Projects
        WHERE  pid = NEW.pid;

        SELECT COALESCE(sum(hours), 0) INTO currentTotalHours
        FROM   Works
        WHERE  pid = NEW.pid;

        IF currentTotalHours * 100 > projectBudget THEN
            NEW.hours := FLOOR(projectBudget/100 - currentTotalHours);
        END IF;
        RETURN NEW;
    END IF;
END;
$$ LANGUAGE plpgsql;

CREATE TRIGGER insertUpdateWorks
BEFORE INSERT OR UPDATE ON Works
FOR EACH ROW EXECUTE FUNCTION checkMaximumWorkHours();
```