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SWEN304: Assignment 3 Question 2

```plpgsql
CREATE OR REPLACE FUNCTION coursePass (In_sId int, In_cId char, In_year int, In_grade char,
In_graduationDate date)
RETURNS varchar AS
$$
BEGIN
        IF EXISTS (SELECT 1 FROM student WHERE In_sId = sId)
        AND EXISTS (SELECT 1 FROM course WHERE In_cId = cId) THEN
        -- --- START ----------------------------------------------------------

                -- Inserting the result into result table
                IF NOT EXISTS (SELECT 1 FROM result
                WHERE In_sId = sId AND In_cId = cId AND In_year = year) THEN
                        IF (In_grade!='D')
                        THEN
                                IF EXISTS (SELECT 1 FROM result
                                WHERE sid = In_sId AND cId = In_cId AND (grade='D' OR grade='E'))
                                OR NOT EXISTS
                                (SELECT 1 FROM result WHERE sid = In_sId AND cId = In_cId)
                                THEN
                                        INSERT INTO result VALUES (In_sId, In_cId, In_year, In_grade);

                                        -- Updating student points by finding the course point
                                        UPDATE student SET pointsearned = pointsearned+(SELECT
                                points FROM course WHERE cid = In_cId) WHERE sId = In_sId;

                                ELSE
                                        INSERT INTO result VALUES (In_sId, In_cId, In_year, In_grade);
                                END IF;
                        END IF;
                ELSE
                        RAISE EXCEPTION 'This result entry already exists.';
                END IF;

                -- If the student has 360 points or more, insert them into graduate table
                IF (SELECT pointsearned FROM student WHERE sId=In_sId)>=360 THEN
                        INSERT INTO graduate VALUES (In_sId, In_graduationDate);
                END IF;

        -- --- END ------------------------------------------------------------
        ELSE
                RAISE EXCEPTION 'Course or Student ID doesn't exist.';
        END IF;

        IF (In_grade='D' OR In_grade='E') THEN
                RETURN 'fail';
        ELSE
                RETURN 'pass';
        END IF;

END;
$$
LANGUAGE 'PLpgSQL';
```