Question: Who appeared in exactly one scene in the movie ‘Psycho’ produced in 1960? List ids of these actors/actresses.

Student's answer: SELECT person.id

FROM movie, role, appearance, person

WHERE movie.title = role.title = appearance.title AND movie.production\_year = role.production\_year = appearance.production\_year

AND role.id = person.id

AND movie.title = 'Psycho'

AND movie.production\_year = 1960

AND appearance.scene\_no = 1;

True Category: partially correct

Response: ```json

{

"category": "partially correct",

"feedback": {

"summary": "The query is partially correct but does not accurately filter actors who appeared in exactly one scene.",

"detailed\_explanation": "The query correctly joins the necessary tables and filters for the movie 'Psycho' produced in 1960. However, it only selects actors who appeared in scene number 1, which does not address the requirement to find actors who appeared in exactly one scene.",

"specific\_errors": [

{

"description": "The query filters for actors who appeared in scene number 1, but it does not ensure that these actors appeared in exactly one scene.",

"suggestion": "Use a subquery to count the number of scenes each actor appeared in and filter for those who appeared in exactly one scene."

}

],

"improvement\_suggestions": "To find actors who appeared in exactly one scene, you need to use a subquery that counts the number of scenes each actor appeared in and then filter for those with a count of 1. Here is an example query that accomplishes this:

```sql

SELECT person.id

FROM movie, role, appearance, person

WHERE movie.title = role.title = appearance.title AND movie.production\_year = role.production\_year = appearance.production\_year

AND role.id = person.id

AND movie.title = 'Psycho'

AND movie.production\_year = 1960

GROUP BY person.id

HAVING COUNT(DISTINCT appearance.scene\_no) = 1;

```

This query groups the results by actor ID and uses the `HAVING` clause to filter for actors who appeared in exactly one distinct scene."

}

}

```

SELECT

r.id

FROM

scene s,

appearance a,

ROLE r

WHERE

s.title = a.title

AND s.production\_year = a.production\_year

AND s.scene\_no = a.scene\_no

AND s.title = r.title

AND s.production\_year = r.production\_year

AND a.description = r.description

AND lower(a.title) = 'psycho'

AND a.production\_year = 1960

GROUP BY

r.id

HAVING

count(\*) = 1;