Министерство образования Республики Беларусь
Учреждение образования

БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ
ИНФОРМАТИКИ И РАДИОЭЛЕКТРОНИКИ

Факультет компьютерного проектирования
Кафедра инженерной психологии и эргономики

Базы данных
ОТЧЁТ
по лабораторной работе №6
«Транзакции»

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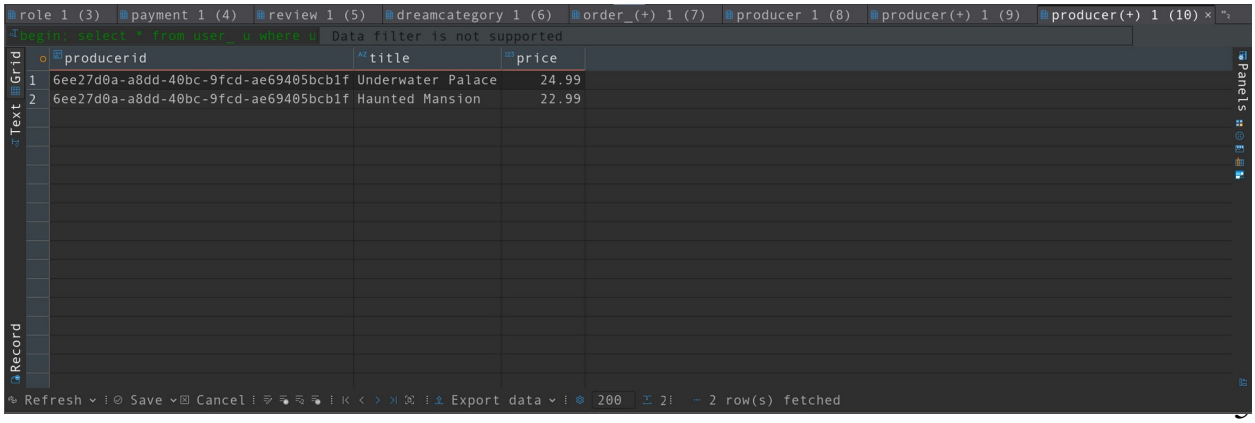
# Транзакция 1. Лабораторная №4:

```
begin;
        select * from user_ u where u.produceruserid is null;


        select * from dream d where d.price < 25;


        select * from "role";

        select * from payment p where p.orderid  = 'c219a71c-a74f-4396-bda5-84e0e7b5c521';


        select * from review r where userid = '0b6ad028-8582-432b-af34-e83f090760a4';

        select * from dreamcategory d ;

        select
                o.userid ,
                d.title ,
                d.price ,
                xref.count
        from order_ o
        join orderdreamxref xref on o.orderid = xref.orderId
        join dream d  on xref.dreamid = d.dreamid
        where o.orderid = '56002ce6-b61b-44b1-bf8e-6456a173d076';


        select * from producer p ;

        select p.title ,pu.secretkey , u."name"
        from produceruser pu
        join producer p on p.producerid = pu.producerid
        join user_ u on pu.produceruserid = u.produceruserid
        where p.title = 'Lucid Labs';


        select p.producerid, d.title, d.price from dream d
        join producer p on d.producerid  = p.producerid
        where p.title  = 'Lucid Labs';


commit;
```



Транзакция 2. Лабораторная №5:

```
begin;

SELECT
   p.Title AS producer_title,
   COUNT(d.dreamid) as dream_count
FROM Producer p
JOIN Dream d ON p.ProducerId = d.ProducerId
GROUP BY p.Title
HAVING COUNT(d.DreamId) >= (
   SELECT AVG(dream_count)
   FROM (
      SELECT COUNT(DreamId) AS dream_count
      FROM Dream
      GROUP BY ProducerId
   ) AS counts
);



SELECT
   u.Name,
   AVG(r.Rating) AS avg_rating
FROM User_ u
JOIN Review r ON u.ConsumerUserId = r.UserId
GROUP BY u.ConsumerUserId, u.Name
HAVING AVG(r.Rating) > 4.0
ORDER BY avg_rating DESC;


SELECT ConsumerUserId, Name FROM User_
EXCEPT
SELECT DISTINCT u.ConsumerUserId, u.Name
FROM User_ u
JOIN Order_ o ON u.ConsumerUserId = o.UserId;


SELECT d.DreamId, d.Title
FROM Dream d
JOIN OrderDreamXRef odx ON d.DreamId = odx.DreamId

INTERSECT

SELECT DreamId, Title
FROM Dream;


WITH RankedDreams AS (
   SELECT
      d.Title AS dream_title,
      dc.Title AS category,
      d.Price,
      ROW_NUMBER() OVER (PARTITION BY dc.DreamCategoryId ORDER BY d.Price DESC) AS rn
```

```
    FROM Dream d
    JOIN DreamCategoryDreamXRef dcdx ON d.DreamId = dcdx.DreamId
    JOIN DreamCategory dc ON dcdx.DreamCategoryId = dc.DreamCategoryId
)
SELECT dream_title, category, Price
FROM RankedDreams
WHERE rn <= 3;



SELECT
    p.Title AS producer,
    SUM(d.Price * odx.Count) AS total_revenue
FROM Producer p
JOIN Dream d ON p.ProducerId = d.ProducerId
JOIN OrderDreamXRef odx ON d.DreamId = odx.DreamId
JOIN Order_ o ON odx.OrderId = o.OrderId
GROUP BY p.ProducerId, p.Title
ORDER BY total_revenue DESC;


-- Пользователи, оставившие отзывы на ВСЕ сны от 'DreamWorks Studio'
SELECT u.Name
FROM User_ u
WHERE NOT EXISTS (
    -- Найти сон от DreamWorks Studio, на который у пользователя НЕТ отзыва
    SELECT d.DreamId
    FROM Dream d
    JOIN Producer p ON d.ProducerId = p.ProducerId
    WHERE p.Title = 'DreamWorks Studio'
    EXCEPT
    SELECT r.DreamId
    FROM Review r
    WHERE r.UserId = u.ConsumerUserId
);


SELECT 'Dream Average Rating' AS metric, AVG(Dream.price) AS value
FROM Dream
UNION ALL
SELECT 'Review Average Rating', AVG(Rating)
FROM Review;



SELECT u.Name, u.Email
FROM User_ u
WHERE EXISTS (
    SELECT 1 FROM Order_ o WHERE o.UserId = u.ConsumerUserId
)
AND NOT EXISTS (
    SELECT 1 FROM Review r WHERE r.UserId = u.ConsumerUserId
);
```

```
SELECT 'Average Dream Price' AS metric, AVG(Price) AS value
FROM Dream
UNION ALL
SELECT 'Average Review Rating', AVG(Rating)
FROM Review;

commit;
```