

שאלות

1. האם ספר X נמצא במלאי של החנות ובמלאי של המחסן. אם כן, מצוין כמה עותקים של הספר נמצאים.

```
SELECT title, author, SUM(store_items.amount) AS store_amount, SUM(storage_items.amount) AS storage_amount
FROM yad_two_store.book_attributes
LEFT JOIN yad_two_store.store_items ON store_items.book_id = book_attributes.book_id
LEFT JOIN yad_two_store.storage_items ON storage_items.book_id = book_attributes.book_id
WHERE book_attributes.title = "Room for rent";
```

2. מי הוא הלקוח הוותיק ביותר? הלקוח שרכש ספר לפני הכי הרבה זמן.

```
SELECT MIN(trans_date) AS 'oldest_date', CONCAT(cust_fname, ' ', cust_lname) AS full_name, book_attributes.title, book_attributes.author
FROM yad_two_store.transactions
LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
LEFT JOIN yad_two_store.customers ON customers.cust_id = transactions.cust_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = transaction_details.book_id;
```

3. מה הוא הספר הוותיק ביותר? הספר שנמצא הכי הרבה זמן במלאי.

```
SELECT trans_date, title, author
FROM (
  SELECT trans_date, book_attributes.book_id, title, author
  FROM (
    SELECT trans_date, transaction_details.book_id
    FROM yad_two_store.transactions
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
    GROUP BY trans_date
    ORDER BY trans_date DESC
  ) AS boughts_in_asc_order
  LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = boughts_in_asc_order.book_id
  GROUP BY book_attributes.book_id
) AS c
ORDER BY trans_date ASC
LIMIT 1;
```

4. רשימת הזמנות מסודרת לפי תאריכי הזמנה:

```
SELECT order_details.order_id, CONCAT(cust_fname, ' ', cust_lname) AS full_name, order_details.book_id, title,
       order_date, method_options.meth_type, shipping_options.ship_type
FROM yad_two_store.orders
LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
LEFT JOIN yad_two_store.customers ON customers.cust_id = orders.cust_id
LEFT JOIN yad_two_store.method_options ON method_options.meth_id = orders.meth_id
LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = orders.ship_id
WHERE status_id != 4
GROUP BY order_date
ORDER BY order_date ASC;
```

5. כמה עותקים של ספר X נמכרו ע"י החנות. מוחזר מספר הפעמים שהספר נרכש וכמה עותקים בסה"כ של הספר נמכרו.

```
SELECT author, count(title) AS sales_num, SUM(book_amount) AS books_num
FROM yad_two_store.transactions
LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = transaction_details.book_id
WHERE title = "The Little Prince";
```

6. מי הסופר הכי נקרא בתווך תאריכים X עד Y. הסופר, אשר מכר הכי הרבה ספרים בין התאריכים.

```
SELECT author, SUM(book_amount) AS count
FROM (
    SELECT transaction_details.trans_id, book_id, book_amount
    FROM yad_two_store.transactions
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
    WHERE trans_date BETWEEN "2018-01-01" AND "2019-04-04"
) sold_bet
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = sold_bet.book_id
GROUP BY author
ORDER BY count DESC
LIMIT 1;
```

7. רשימת 3 הלקוחות שרכשו הכי הרבה ספרים לאורך השנים.

```
SELECT customers.cust_id, CONCAT(cust_fname, ' ', cust_lname) AS full_name, phone, SUM(book_amount) AS buy_amount
FROM(
    SELECT transaction_details.trans_id, book_id, book_amount, cust_id
    FROM yad_two_store.transactions
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
) AS sold_bet
LEFT JOIN yad_two_store.customers ON customers.cust_id = sold_bet.cust_id
GROUP BY cust_id
ORDER BY buy_amount DESC
LIMIT 3;
```

8. מי הוא הספר עם מספר התרגומים הגדול ביותר שקיים כרגע במלאי. הספר שתורגם להכי הרבה שפות.

```
SELECT title, author, COUNT(DISTINCT(language)) most_common
FROM (
    SELECT a.book_id, a.title, a.language, a.author
    FROM yad_two_store.book_attributes a, yad_two_store.book_attributes b
    WHERE a.title = b.title AND a.language <> b.language
    GROUP BY a.book_id
)AS c
GROUP BY title
ORDER BY most_common DESC
LIMIT 1;
```

9. היסטוריית רכישות של לקוח X.

אלו ספרים רכש, באלו תאריכים ומה המחיר ששילם עבור כל ספר. מסודר לפי תאריכי הזמנה.

```
SELECT trans_id, book_attributes.book_id, CONCAT(cust_fname, ' ', cust_lname) AS full_name, trans_date, book_amount,
title, author, cust_price, (cust_price * book_amount) AS sum_cost
FROM (
    SELECT transaction_details.trans_id, book_id, cust_id, trans_date, book_amount
    FROM yad_two_store.transactions
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
    WHERE cust_id = 4
) AS cust_bought
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = cust_bought.book_id
LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = cust_bought.book_id
LEFT JOIN yad_two_store.customers ON customers.cust_id = cust_bought.cust_id
ORDER BY trans_date DESC;
```

10. לגבי אדם X: היסטוריית הזמנות. מה ומתי הזמין. מסודר לפי תאריכי הזמנה.
ציון האם הספר אכן נמצא, ואם כן האם רכש.

```
SELECT order_id, CONCAT(cust_fname, ' ', cust_lname) AS full_name, order_date, book_ids, title, author, address
FROM(
  SELECT order_id, store_items.book_id, amount, order_date, book_ids, title, author, cust_id, address
  FROM(
    SELECT order_details.order_id, cust_id, order_details.book_id, order_date, GROUP_CONCAT(distinct(order_details.book_id))as book_ids,
    GROUP_CONCAT(Distinct title SEPARATOR ',') AS title, GROUP_CONCAT(Distinct author SEPARATOR ',') AS author,
    GROUP_CONCAT(Distinct address SEPARATOR ',') AS address
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
    LEFT JOIN yad_two_store.shipping_destination ON shipping_destination.dest_id = order_details.dest_id
    WHERE cust_id = 7
    GROUP BY orders.order_id
  ) AS cust_bought
  LEFT JOIN yad_two_store.store_items ON store_items.book_id = cust_bought.book_id
  WHERE store_items.amount > 0
  GROUP BY cust_bought.order_id
)AS in_store
LEFT JOIN yad_two_store.customers ON customers.cust_id = in_store.cust_id
```

11. חישוב עלות משלוח. יצירת טבלה זמנית. בטבלה נחשב את עלות המשלוח
בצורה הבאה: סכום משקלי כל הספרים + מחיר התחלתי של המשלוח של חברת
השליחויות.

```
CREATE TEMPORARY TABLE yad_two_store.temp_table
SELECT order_id, book_id, book_amount, book_weight, ship_cost, weight_amount, (SUM(weight_amount) + ship_cost)AS total_ship_amount
FROM(
  SELECT GROUP_CONCAT(distinct(order_id))as order_id, GROUP_CONCAT(distinct(book_prices.book_id))as book_id,
  GROUP_CONCAT(book_amount)as book_amount, GROUP_CONCAT(book_weight)as book_weight,
  cust_price, ship_cost, SUM(book_amount * book_weight) AS weight_amount
  FROM(
    SELECT cust_id, order_date, meth_id, ship_id, status_id, book_amount, book_weight, order_details.order_id, book_attributes.book_id
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
    WHERE order_details.order_id = 9
  )AS ords
  LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = ords.book_id
  LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = ords.ship_id
)AS sum
```

משיכה מהטבלה הזמנית:

```
SELECT * FROM yad_two_store.temp_table
```


מחיקת הטבלה הזמנית:

```
DROP TEMPORARY TABLE yad_two_store.temp_table;
```

12. האם לקוח X פיצל, אי פעם, רכישת ספרים למספר משלוחים ואם כן מה הם נתוני המשלוחים.

```
SELECT order_id, GROUP_CONCAT(distinct book_id SEPARATOR ',') AS book_id, full_name, order_date,
GROUP_CONCAT(distinct meth_type SEPARATOR ',') AS meth_type, GROUP_CONCAT(distinct book_amount SEPARATOR ',') AS book_amount,
GROUP_CONCAT(distinct cust_price SEPARATOR ',') AS cust_price, GROUP_CONCAT(distinct address SEPARATOR ',') AS address,
GROUP_CONCAT(status_type SEPARATOR ',') AS status_type, ship_cost, (SUM(amount_price + amount_weight)) + ship_cost as total_amount_topay
FROM (
  SELECT
    book_prices.book_id, order_id, order_date, meth_id, ship_id, full_name, status_id, book_amount, dest_id, book_prices.cust_price,
    (book_amount * book_prices.cust_price) as amount_price, (book_amount * book_weight) as amount_weight
  FROM(
    SELECT order_id, book_id, CONCAT(customers.cust_fname, ' ', customers.cust_lname) AS full_name, order_date,
    meth_id, ship_id, status_id, book_amount, dest_id
    FROM(
      SELECT DISTINCT orders.order_id, cust_id, order_date, meth_id, ship_id, status_id, a.book_id, a.book_amount, a.dest_id
      FROM yad_two_store.order_details a, yad_two_store.order_details b
      LEFT JOIN yad_two_store.orders ON orders.order_id = b.order_id
      WHERE a.order_id = b.order_id and a.dest_id != b.dest_id and cust_id = 7
    )AS ords
    LEFT JOIN yad_two_store.customers ON customers.cust_id = ords.cust_id
  )AS ords_cust
  LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = ords_cust.book_id
  LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = ords_cust.book_id
)AS dets
LEFT JOIN yad_two_store.shipping_status ON shipping_status.status_id = dets.status_id
LEFT JOIN yad_two_store.shipping_destination ON shipping_destination.dest_id = dets.dest_id
LEFT JOIN yad_two_store.method_options ON method_options.meth_id = dets.meth_id
LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = dets.ship_id
```

13. מה הוא הסטטוס הנוכחי של משלוח מסוים:

```
SELECT order_details.order_id, GROUP_CONCAT(Distinct book_attributes.book_id SEPARATOR ',') AS book_id, GROUP_CONCAT(Distinct title SEPARATOR ',') AS title,
customers.cust_id, CONCAT(cust_fname, ' ', cust_lname) AS full_name, GROUP_CONCAT(Distinct order_date SEPARATOR ',') AS order_date,
method_options.meth_type, shipping_options.ship_type, status_type
FROM yad_two_store.orders
LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
LEFT JOIN yad_two_store.shipping_status ON shipping_status.status_id = orders.status_id
LEFT JOIN yad_two_store.customers ON customers.cust_id = orders.cust_id
LEFT JOIN yad_two_store.method_options ON method_options.meth_id = orders.meth_id
LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = orders.ship_id
WHERE order_details.order_id = 12
GROUP BY order_id
```

14. מה סכום המשלוחים שבוצעו על ידי חברת Xpress בחודש מסוים:

```
SELECT COUNT(order_id) AS order_num, SUM(order_price) AS sum_amount
FROM (
    SELECT order_details.order_id, book_attributes.book_id, title, ship_cost, book_amount, book_weight, cust_price,
    SUM((book_amount * book_weight) + (book_amount * cust_price)) + ship_cost AS order_price
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
    LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = orders.ship_id
    LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = order_details.book_id
    WHERE order_date BETWEEN "2018-01-01" AND "2020-02-06"
    GROUP BY order_id
)AS sum
```

15. סך הכסף שהועבר לחשבון החנות באמצעות אפליקציית Bit בחודש מסוים:

```
SELECT SUM(book_amount * cust_price) AS sum_price
FROM yad_two_store.transactions
LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = transaction_details.book_id
WHERE (trans_date BETWEEN "2020-07-01" AND "2020-07-30") AND meth_id = 2;
```

16. מהן העסקאות שבוצעו במהלך 12 החודשים האחרונים, ואשר הניבו רווח גדול יותר מרווח העסקאות הממוצע ב- 12 החודשים האלו.

```
SELECT trans_id, title, cust_fname, al.trans_date, meth_type, book_amount, emp_fname, profit
FROM yad_two_store.book_attributes AS a
JOIN (
    SELECT transaction_details.trans_id, transaction_details.book_id, al.cust_id, al.trans_date, al.meth_id,
    transaction_details.book_amount, al.emp_id, (transaction_details.book_amount * cust_price) - (transaction_details.book_amount * store_price)AS profit
    FROM yad_two_store.transactions AS al
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = al.trans_id
    LEFT JOIN yad_two_store.book_prices on book_prices.book_id = transaction_details.book_id
    WHERE trans_date BETWEEN (NOW() - INTERVAL 1 year) AND NOW()
) AS al ON al.book_id = a.book_id
JOIN (
    SELECT AVG(c.profit) AS Average
    FROM (
        SELECT (book_amount * cust_price) - (book_amount * store_price)AS profit
        FROM yad_two_store.transactions AS al
        LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = al.trans_id
        LEFT JOIN yad_two_store.book_prices on book_prices.book_id = transaction_details.book_id
        WHERE trans_date BETWEEN (NOW() - INTERVAL 1 year) AND NOW()
    ) AS c
) AS av ON al.profit > av.Average
LEFT JOIN yad_two_store.customers on customers.cust_id = al.cust_id
LEFT JOIN yad_two_store.method_options on method_options.meth_id = al.meth_id
LEFT JOIN yad_two_store.store_employees on store_employees.emp_id = al.emp_id
```

17. כמה משלוחים בוצעו במהלך 12 החודשים האחרונים באמצעות דואר ישראל, וכמה בוצעו באמצעות חברת Xpress.

```
SELECT SUM(ship_id = 5) AS xprss, SUM(ship_id = 1) AS isrl
FROM yad_two_store.orders
WHERE (order_date BETWEEN(NOW() - INTERVAL 1 year) AND NOW()) AND (ship_id = 5 OR ship_id = 1);
```

18. נתונים על כל המשלוחים שבוצעו, אי פעם, וכללו לפחות 2 מהדורות שונות של אותו הספר.

```
CREATE TEMPORARY TABLE yad_two_store.tablee
SELECT order_id, group_concat(Distinct d.book_id SEPARATOR ',') AS books_ids, order_date,
CONCAT(cust_fname, ' ', cust_lname) AS full_name,
GROUP_CONCAT(book_amount SEPARATOR ',') AS books_numbers,
GROUP_CONCAT(Distinct e.status_type SEPARATOR ',') AS status_type,
GROUP_CONCAT(Distinct f.ship_cost SEPARATOR ',') AS ship_cost,
GROUP_CONCAT(Distinct address SEPARATOR ',') AS address,
GROUP_CONCAT(Distinct title SEPARATOR ',') AS titless,
GROUP_CONCAT(book_weight SEPARATOR ',') AS weightss,
GROUP_CONCAT(cust_price SEPARATOR ',') AS prices
FROM(
select order_id, c.book_id, book_amount, cust_id, order_date, meth_id, ship_id, status_id, dest_id, title, book_weight
FROM(
SELECT distinct a.order_id, a.book_id, a.book_amount, cust_id, order_date, meth_id, ship_id, status_id, a.dest_id
FROM yad_two_store.order_details a, yad_two_store.order_details b
INNER JOIN yad_two_store.orders ON orders.order_id = b.order_id
WHERE a.order_id = b.order_id AND a.book_id != b.book_id
)AS details
INNER JOIN yad_two_store.book_attributes c ON details.book_id = c.book_id
)AS orders_det
INNER JOIN yad_two_store.book_prices d ON orders_det.book_id = d.book_id
INNER JOIN yad_two_store.shipping_status e ON orders_det.status_id = e.status_id
INNER JOIN yad_two_store.shipping_options f ON orders_det.ship_id = f.ship_id
INNER JOIN yad_two_store.customers g ON orders_det.cust_id = g.cust_id
INNER JOIN yad_two_store.shipping_destination h ON orders_det.dest_id = h.dest_id
GROUP BY order_id

SELECT *
FROM yad_two_store.tablee
WHERE (CHAR_LENGTH(books_ids) - CHAR_LENGTH(REPLACE(books_ids, ',', '')) + 1) != (CHAR_LENGTH(titless) - CHAR_LENGTH(REPLACE(titless, ',', '')) + 1);
```


19. נתונים על כל הלקוחות שרכשו בעבר, מתי שהוא, לפחות ספר אחד מהחנות, ושלא ביצעו שום רכישה במהלך 24 החודשים האחרונים.

```
SELECT
customers.cust_id, customers.cust_fname, customers.cust_lname, customers.phone, trans_date, book_amount, title, author
FROM(
    SELECT trans_date, book_amount, cust_id, book_id
    FROM(
        SELECT trans_date, book_amount, cust_id, book_id
        FROM yad_two_store.transactions
        LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
        ORDER BY trans_date DESC
        LIMIT 100
    )as trans
    GROUP BY cust_id
)as trans_cust
LEFT JOIN yad_two_store.customers ON customers.cust_id = trans_cust.cust_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = trans_cust.book_id
WHERE trans_date < (NOW() - INTERVAL 2 year);
```

20. רשימת הלקוחות שביצעו הזמנות, הספרים שהזמינו הגיעו לחנות, החנות יצרה איתם קשר ליידע אותם על זמינות הספר. הקשר נוצר לפני 14 ימים, והלקוחות עדיין לא רכשו הספר.

```
SELECT
order_id, order_date, CONCAT(cust_fname, ' ', cust_lname) AS full_name, phone, title
FROM (
    SELECT order_details.order_id, order_date, book_id, book_amount, cust_id
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    WHERE dest_id = 100 AND status_id = 3 AND order_date < (NOW() - INTERVAL 2 WEEK)
) AS ords
LEFT JOIN yad_two_store.customers ON customers.cust_id = ords.cust_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = ords.book_id
```


21. מספר הספרים במחסן בחתך חודשי

```
SELECT
(
  SELECT (SUM(amount) - books_out) AS in_stock
  FROM yad_two_store.storage_items
  JOIN (
    SELECT SUM(book_amount) as books_out
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    WHERE (order_date BETWEEN '' + year + "-01-01" AND '' + year + "-01-30")
  ) AS books_out
) AS january,
(
  SELECT (SUM(amount) - books_out) AS in_stock
  FROM yad_two_store.storage_items
  JOIN (
    SELECT SUM(book_amount) as books_out
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    WHERE (order_date BETWEEN '' + year + "-02-01" AND '' + year + "-03-01")
  ) AS books_out
) AS february,
(
  SELECT (SUM(amount) - books_out) AS in_stock
  FROM yad_two_store.storage_items
  JOIN (
    SELECT SUM(book_amount) as books_out
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    WHERE (order_date BETWEEN '' + year + "-03-01" AND '' + year + "-04-01")
  ) AS books_out
) AS march,
(
  SELECT (SUM(amount) - books_out) AS in_stock
  FROM yad_two_store.storage_items
  JOIN (
    SELECT SUM(book_amount) as books_out
    FROM yad_two_store.orders
    LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
    WHERE (order_date BETWEEN '' + year + "-04-01" AND '' + year + "-05-01")
  ) AS books_out
) AS april,
```

```

(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN "" + year + "-05-01" AND "" + year + "-06-01")
    ) AS books_out
) AS may,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN "" + year + "-06-01" AND "" + year + "-07-01")
    ) AS books_out
) AS june,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN "" + year + "-07-01" AND "" + year + "-08-01")
    ) AS books_out
) AS july,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN "" + year + "-08-01" AND "" + year + "-09-01")
    ) AS books_out
) AS august,

```

```

(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN '' + year + "-09-01" AND '' + year + "-10-01")
    ) AS books_out
) AS sept,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN '' + year + "-10-01" AND '' + year + "-11-01")
    ) AS books_out
) AS auctober,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN '' + year + "-11-01" AND '' + year + "-12-01")
    ) AS books_out
) AS nov,
(
    SELECT (SUM(amount) - books_out) AS in_stock
    FROM yad_two_store.storage_items
    JOIN (
        SELECT SUM(book_amount) as books_out
        FROM yad_two_store.orders
        LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
        WHERE (order_date BETWEEN '' + year + "-12-01" AND '' + nextYear + "-01-01")
    ) AS books_out
) AS dece

```


22. כמה ספרים רכשה החנות בין תאריך D1 לתאריך D2, ומה היה סך התשלום עבורם

```
SELECT SUM(book_amount) AS books_num, SUM((book_amount * store_price) + (book_amount * book_weight) + ship_cost) AS total_price
FROM yad_two_store.orders
LEFT JOIN yad_two_store.order_details ON order_details.order_id = orders.order_id
LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = order_details.book_id
LEFT JOIN yad_two_store.book_attributes ON book_attributes.book_id = order_details.book_id
LEFT JOIN yad_two_store.shipping_options ON shipping_options.ship_id = orders.ship_id
WHERE order_date BETWEEN ' ' + sDate + ' ' AND ' ' + fDate + ' ' AND cust_id = 100;
```

23. רווח החנות ממכירות בחודש מסוים:

```
SELECT SUM(cust_price - store_price) AS store_profit
FROM yad_two_store.transactions
LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = transaction_details.book_id
WHERE trans_date BETWEEN ' ' + year + '-' + month + '-01' AND ' ' + year + '-' + month + '-30';
```

24. ממוצע עסקאות שנתי בחתך חודשי

```

SELECT
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-01-01" AND '' + year + "-02-01")
) AS january,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-02-01" AND '' + year + "-03-01")
) AS february,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-03-01" AND '' + year + "-04-01")
) AS march,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-04-01" AND '' + year + "-05-01")
) AS april,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-05-01" AND '' + year + "-06-01")
) AS may,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-06-01" AND '' + year + "-07-01")
) AS june,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-07-01" AND '' + year + "-08-01")
) AS jul,

```

```

(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-08-01" AND '' + year + "-09-01")
) AS aug,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-09-01" AND '' + year + "-10-01")
) AS sept,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-10-01" AND '' + year + "-11-01")
) AS auktober,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-11-01" AND '' + year + "-12-01")
) AS nov,
(
    SELECT COUNT(*)
    FROM yad_two_store.transactions
    WHERE (trans_date BETWEEN '' + year + "-12-01" AND '' + nextYear + "-01-01")
) AS dece

```

25. המשכורת ברוטו של עובד מסוים בחודש מסוים

```

SELECT
store_employees.emp_fname, store_employees.emp_lname, sales, hours_per_month, SUM(sales * 0.1 + hours_per_month * 25) AS bruto_salary
FROM (
    SELECT emp_id, SUM(book_amount * cust_price) as sales
    FROM yad_two_store.transactions
    LEFT JOIN yad_two_store.transaction_details ON transaction_details.trans_id = transactions.trans_id
    LEFT JOIN yad_two_store.book_prices ON book_prices.book_id = transaction_details.book_id
    WHERE trans_date BETWEEN '' + year + "-" + month + "-01" AND '' + year + "-" + month + "-30" AND emp_id = '' + to_string(emp_id) + ''
) AS sales_bet
LEFT JOIN yad_two_store.employee_salary ON employee_salary.emp_id = sales_bet.emp_id
LEFT JOIN yad_two_store.store_employees ON store_employees.emp_id = sales_bet.emp_id
WHERE sales_bet.emp_id = '' + to_string(emp_id) + '' AND year = '' + year + '' and months = '' + month + ''

```


26. מי המוכר עם הכי הרבה עסקאות בחודש מסוים

```
SELECT store_employees.emp_id, emp_fname, emp_lname, emp_phone, transactions_number
FROM (
  SELECT emp_id, COUNT(*) AS transactions_number
  FROM yad_two_store.transactions
  WHERE trans_date BETWEEN '"' + year + "'-' + month + '-01' AND '"' + year + "'-' + month + '-30'
  GROUP BY emp_id
  ORDER BY transactions_number DESC
  LIMIT 1
)AS best
LEFT JOIN yad_two_store.store_employees ON store_employees.emp_id = best.emp_id;
```