Homework Report

by Hasan Dweik

to Ontex Digital Factory

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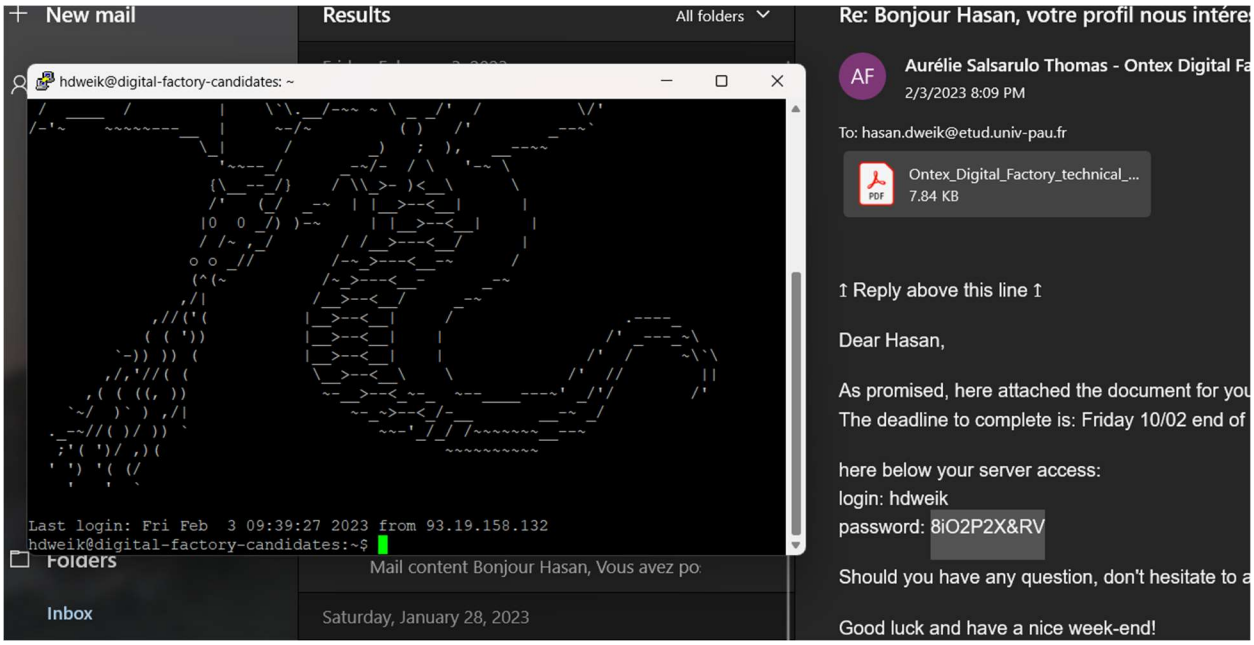
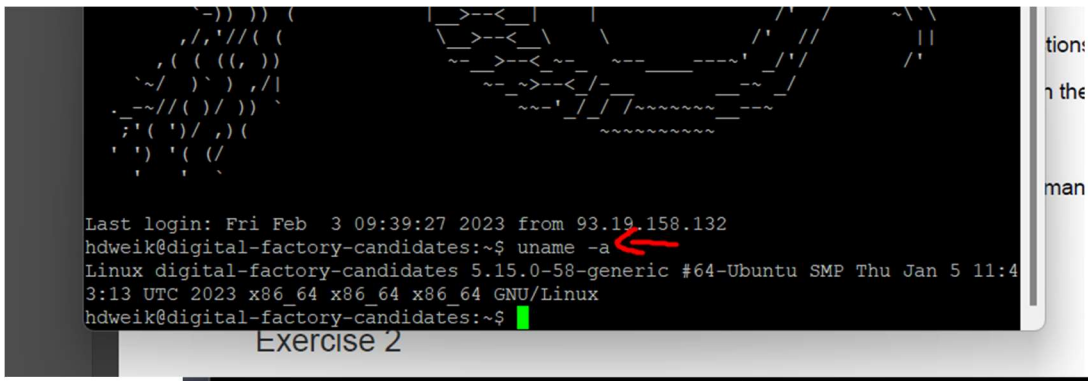
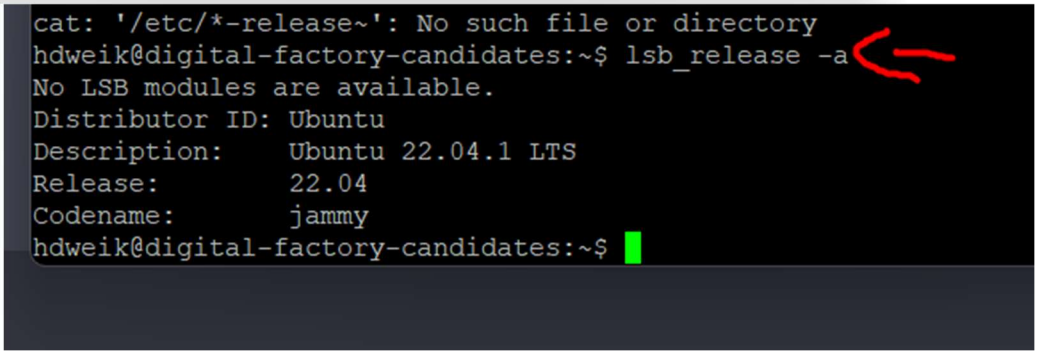
Ex:1:



Connected using putty to the remote server with the IP address 217.69.11.235 and credentials given by email.

1.1

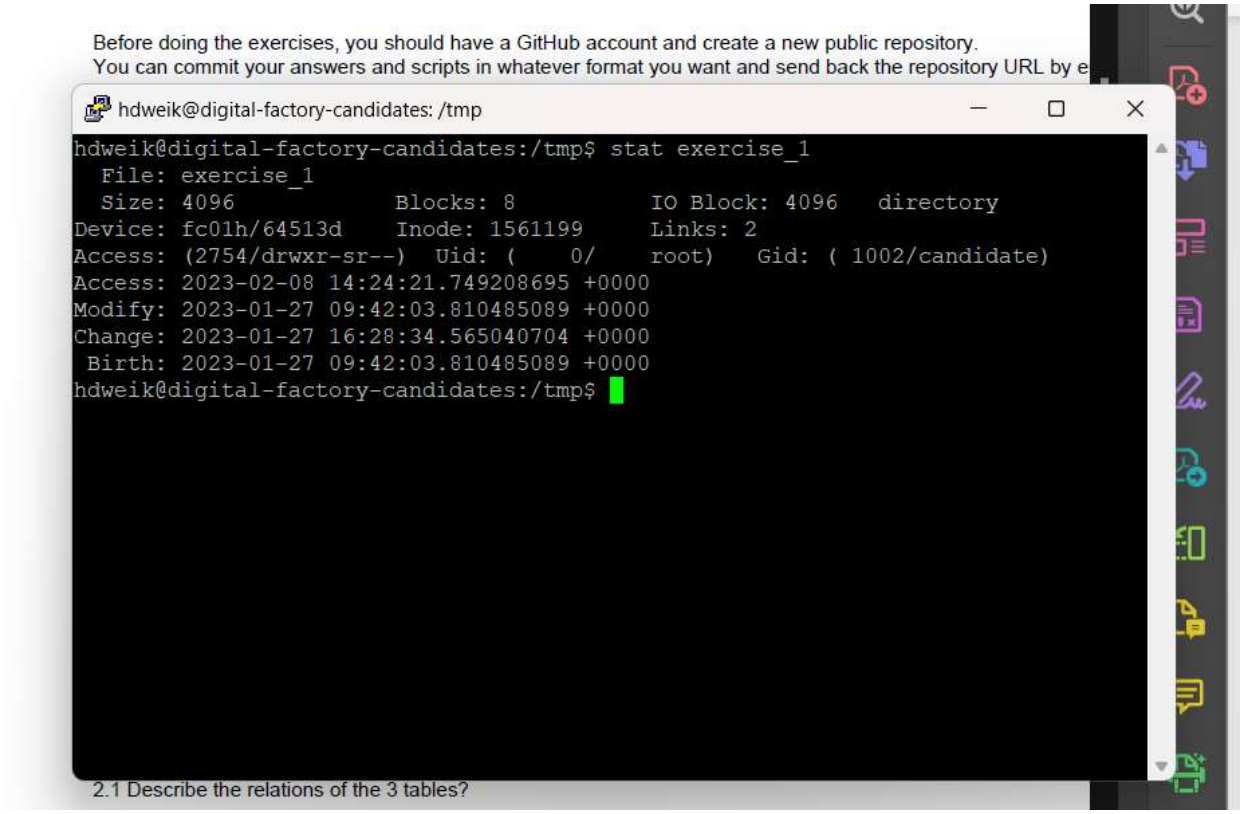




uname -a: This command provides information about the system, including the Linux kernel version and the hostname. The information returned by this command may also give you some hints about the Linux distribution installed on the system.

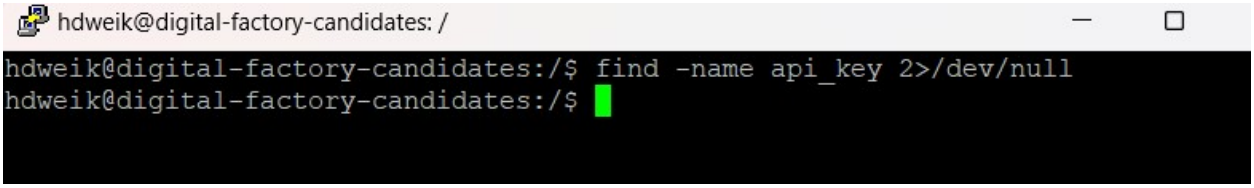
lsb_release: This command is available on most modern Linux distributions and provides information about the distribution release.

1.2



- **drwxr-sr--:** This is the permission string for the folder.
- **d:** Indicates that this is a directory (folder)
- **rwx:** The owner (root) has read, write, and execute permissions for this folder.
- **r-s:** Members of the group (candidate) have read and execute permissions, but not write permissions.
- **r--:** Other users have only read permissions, but not write or execute permissions.
- **Uid:** This is the user ID (UID) of the owner of the folder, which is 0 (root).
- **Gid:** This is the group ID (GID) of the group associated with the folder, which is 1002 (candidate).
- These permissions indicate that the owner of the folder (root) has full control over it, members of the group (candidate) can read and execute its contents, but not modify it, and other users can only read its contents but cannot make any changes.

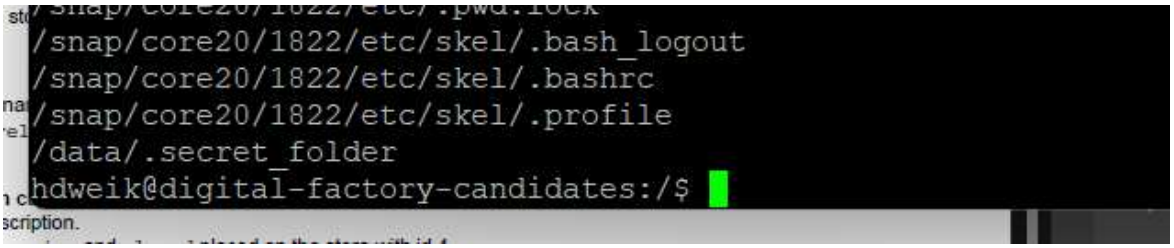
1.3



This command will search for a file named "api_key" starting from the root directory (/) and it will redirect errors (2>/dev/null) to avoid showing any "permission denied" messages.

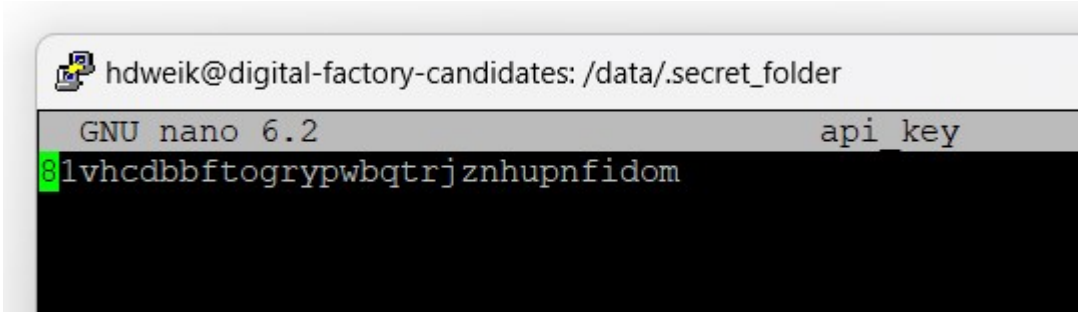
The trick is to show all hidden files.

find / -name ".*" -o -name api_key 2>/dev/null



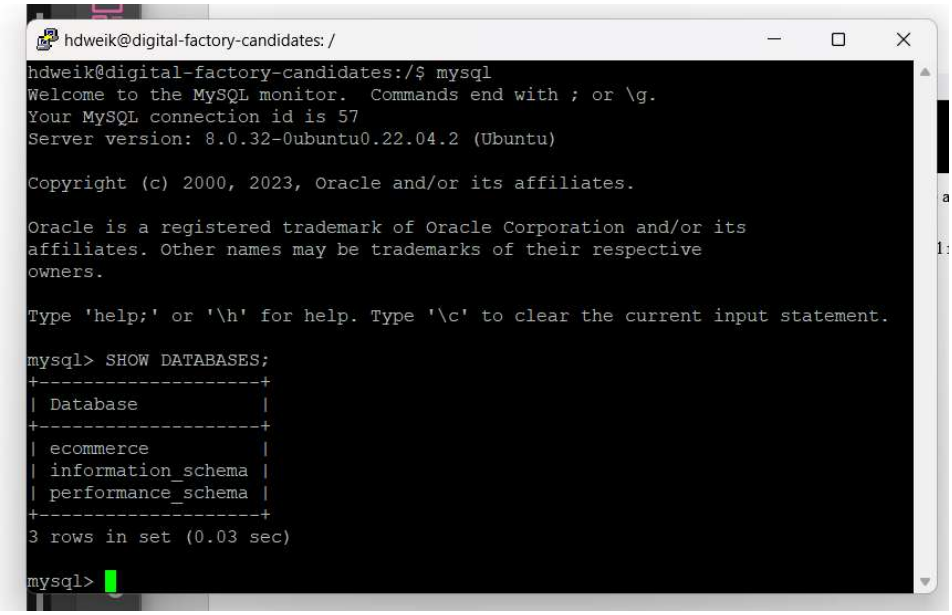
cd /data/.secret_folder

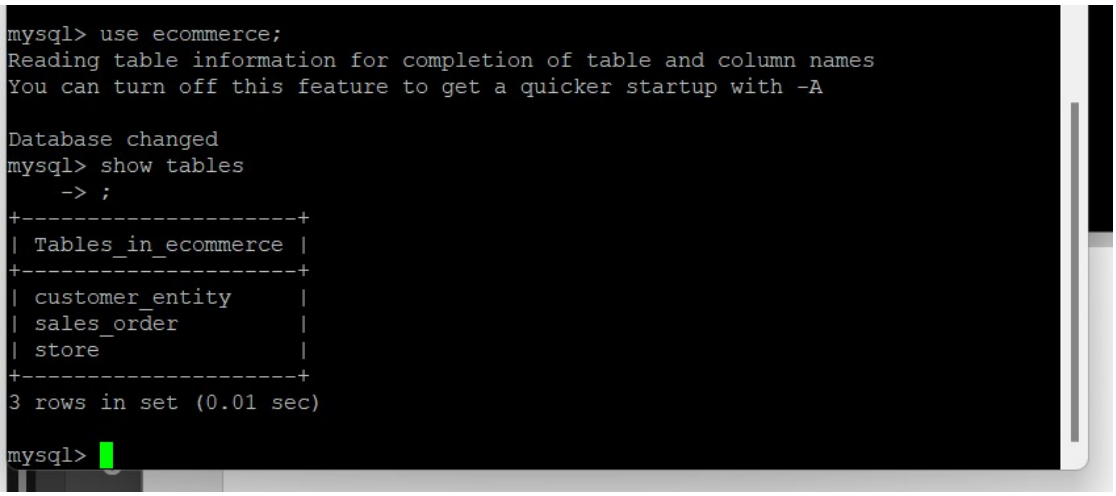
nano api_key



The API key is : 81vhcdbbftogrypwbqtrjznhupnfidom

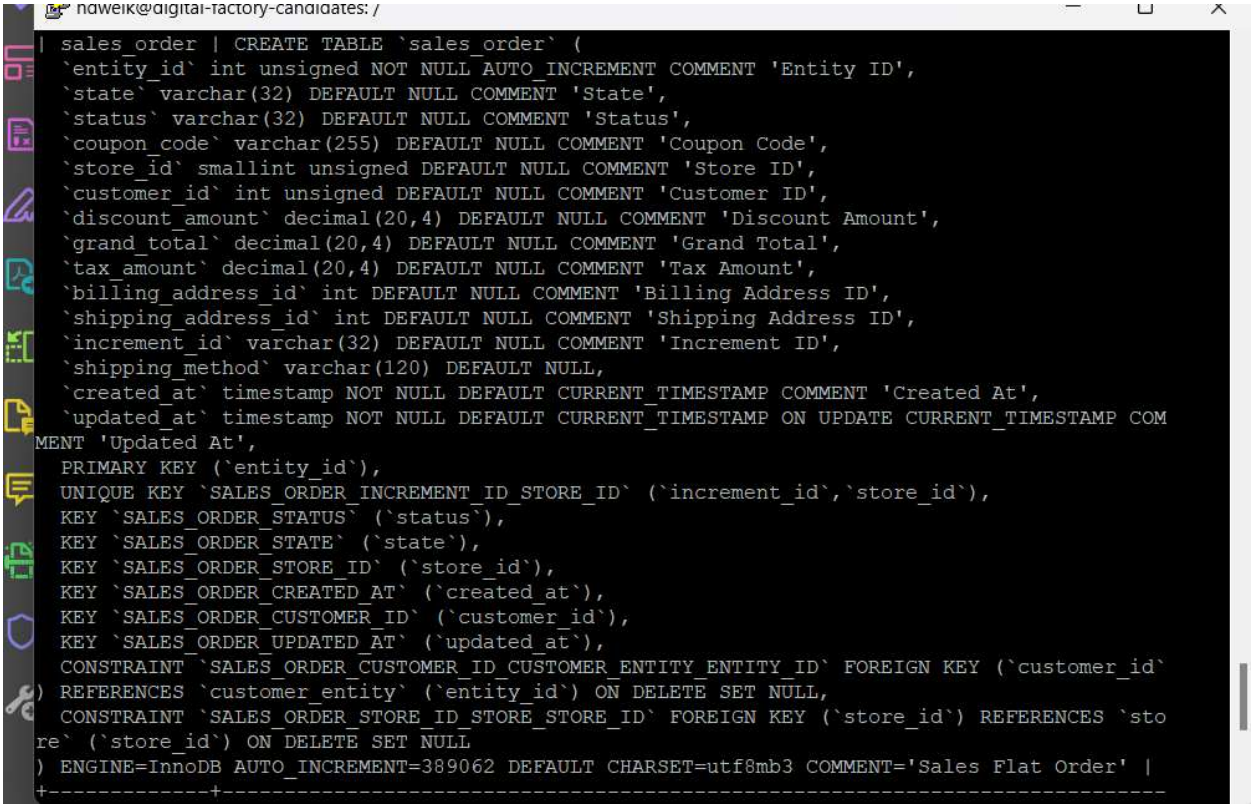
Ex2






```
| store | CREATE TABLE `store` (
  `store_id` smallint unsigned NOT NULL AUTO_INCREMENT COMMENT 'Store ID',
  `code` varchar(32) DEFAULT NULL COMMENT 'Code',
  `website_id` smallint unsigned NOT NULL DEFAULT '0' COMMENT 'Website ID',
  `group_id` smallint unsigned NOT NULL DEFAULT '0' COMMENT 'Group ID',
  `name` varchar(255) NOT NULL COMMENT 'Store Name',
  `sort_order` smallint unsigned NOT NULL DEFAULT '0' COMMENT 'Store Sort Order'
,
  `is_active` smallint unsigned NOT NULL DEFAULT '0' COMMENT 'Store Activity',
  PRIMARY KEY (`store_id`),
  UNIQUE KEY `STORE_CODE` (`code`),
  KEY `STORE_WEBSITE_ID` (`website_id`),
  KEY `STORE_IS_ACTIVE_SORT_ORDER` (`is_active`,`sort_order`),
  KEY `STORE_GROUP_ID` (`group_id`)
) ENGINE=InnoDB AUTO_INCREMENT=10 DEFAULT CHARSET=utf8mb3 COMMENT='Stores' |
```

```
| customer_entity | CREATE TABLE `customer_entity` (
  `entity_id` int unsigned NOT NULL AUTO_INCREMENT COMMENT 'Entity ID',
  `website_id` smallint unsigned DEFAULT NULL COMMENT 'Website ID',
  `email` varchar(255) DEFAULT NULL COMMENT 'Email',
  `group_id` smallint unsigned NOT NULL DEFAULT '0' COMMENT 'Group ID',
  `store_id` smallint unsigned DEFAULT '0' COMMENT 'Store ID',
  `created_at` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP COMMENT 'Created At'
,
  `updated_at` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TI
MESTAMP COMMENT 'Updated At',
  `is_active` smallint unsigned NOT NULL DEFAULT '1' COMMENT 'Is Active',
  `created_in` varchar(255) DEFAULT NULL COMMENT 'Created From',
  `prefix` varchar(40) DEFAULT NULL COMMENT 'Name Prefix',
  `firstname` varchar(255) DEFAULT NULL COMMENT 'First Name',
  `middlename` varchar(255) DEFAULT NULL COMMENT 'Middle Name/Initial',
  `lastname` varchar(255) DEFAULT NULL COMMENT 'Last Name',
  `suffix` varchar(40) DEFAULT NULL COMMENT 'Name Suffix',
  `dob` date DEFAULT NULL COMMENT 'Date of Birth',
  `password_hash` varchar(128) DEFAULT NULL COMMENT 'Password_hash',
  `default_billing` int unsigned DEFAULT NULL COMMENT 'Default Billing Address',
  `default_shipping` int unsigned DEFAULT NULL COMMENT 'Default Shipping Address
'
',
  PRIMARY KEY (`entity_id`),
  UNIQUE KEY `CUSTOMER_ENTITY_EMAIL_WEBSITE_ID` (`email`,`website_id`),
  KEY `CUSTOMER_ENTITY_STORE_ID` (`store_id`),
  KEY `CUSTOMER_ENTITY_WEBSITE_ID` (`website_id`),
  KEY `CUSTOMER_ENTITY_FIRSTNAME` (`firstname`),
  KEY `CUSTOMER_ENTITY_LASTNAME` (`lastname`),
  CONSTRAINT `CUSTOMER_ENTITY_STORE_ID_STORE_STORE_ID` FOREIGN KEY (`store_id`)
REFERENCES `store` (`store_id`) ON DELETE SET NULL
) ENGINE=InnoDB AUTO_INCREMENT=1110746 DEFAULT CHARSET=utf8mb3 COMMENT='Customer
 Entity' |
```



```
ndweik@digital-factory-candidates: /
| sales_order | CREATE TABLE `sales_order` (
  `entity_id` int unsigned NOT NULL AUTO_INCREMENT COMMENT 'Entity ID',
  `state` varchar(32) DEFAULT NULL COMMENT 'State',
  `status` varchar(32) DEFAULT NULL COMMENT 'Status',
  `coupon_code` varchar(255) DEFAULT NULL COMMENT 'Coupon Code',
  `store_id` smallint unsigned DEFAULT NULL COMMENT 'Store ID',
  `customer_id` int unsigned DEFAULT NULL COMMENT 'Customer ID',
  `discount_amount` decimal(20,4) DEFAULT NULL COMMENT 'Discount Amount',
  `grand_total` decimal(20,4) DEFAULT NULL COMMENT 'Grand Total',
  `tax_amount` decimal(20,4) DEFAULT NULL COMMENT 'Tax Amount',
  `billing_address_id` int DEFAULT NULL COMMENT 'Billing Address ID',
  `shipping_address_id` int DEFAULT NULL COMMENT 'Shipping Address ID',
  `increment_id` varchar(32) DEFAULT NULL COMMENT 'Increment ID',
  `shipping_method` varchar(120) DEFAULT NULL,
  `created_at` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP COMMENT 'Created At',
  `updated_at` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON UPDATE CURRENT_TIMESTAMP COM
MENT 'Updated At',
  PRIMARY KEY (`entity_id`),
  UNIQUE KEY `SALES_ORDER_INCREMENT_ID_STORE_ID` (`increment_id`,`store_id`),
  KEY `SALES_ORDER_STATUS` (`status`),
  KEY `SALES_ORDER_STATE` (`state`),
  KEY `SALES_ORDER_STORE_ID` (`store_id`),
  KEY `SALES_ORDER_CREATED_AT` (`created_at`),
  KEY `SALES_ORDER_CUSTOMER_ID` (`customer_id`),
  KEY `SALES_ORDER_UPDATED_AT` (`updated_at`),
  CONSTRAINT `SALES_ORDER_CUSTOMER_ID_CUSTOMER_ENTITY_ENTITY_ID` FOREIGN KEY (`customer_id`
) REFERENCES `customer_entity` (`entity_id`) ON DELETE SET NULL,
  CONSTRAINT `SALES_ORDER_STORE_ID_STORE_STORE_ID` FOREIGN KEY (`store_id`) REFERENCES `sto
re` (`store_id`) ON DELETE SET NULL
) ENGINE=InnoDB AUTO_INCREMENT=389062 DEFAULT CHARSET=utf8mb3 COMMENT='Sales Flat Order' |
+-------------+-------------------------------------------------------------------------
```

2.1

- A customer entity can be associated with a store using the store_id
- Each sales order is associated with a customer and a store using the customer

2.2

SELECT customer_entity.email, sales_order.grand_total, sales_order.created_at

FROM sales_order

INNER JOIN customer_entity ON sales_order.customer_id = customer_entity.entity_id

INNER JOIN store ON sales_order.store_id = store.store_id

WHERE store.name = 'LBC FR-FR' AND sales_order.status = 'processing' AND customer_entity.created_at >= '2022-12-01' AND customer_entity.created_at < '2023-01-01'

AND customer_entity.email LIKE 'odevelop%'

```
mysql> SELECT customer_entity.email, sales_order.grand_total, sales_order.created_at
    -> FROM sales_order
    -> INNER JOIN customer_entity ON sales_order.customer_id = customer_entity.entity_id
    -> INNER JOIN store ON sales_order.store_id = store.store_id
    -> WHERE store.name = 'LBC FR-FR' AND sales_order.status = 'processing' AND customer_entity.
created_at >= '2022-12-01' AND customer_entity.created_at < '2023-01-01'
    -> AND customer_entity.email LIKE 'odevelop%'
    -> ;
+--------------------------------+-------------+---------------------+
| email                          | grand_total | created_at          |
+--------------------------------+-------------+---------------------+
| odevelopement+2077225@gmail.com |     99.6000 | 2022-12-01 05:28:26 |
| odevelopement+5666898@gmail.com |     54.0000 | 2022-12-01 05:32:12 |
| odevelopement+4395508@gmail.com |     54.0000 | 2022-12-01 05:34:11 |
| odevelopement+6100308@gmail.com |     54.0000 | 2022-12-01 06:09:13 |
| odevelopement+8354335@gmail.com |     99.6000 | 2022-12-02 05:19:10 |
| odevelopement+8069083@gmail.com |     54.0000 | 2022-12-02 05:23:11 |
| odevelopement+4795988@gmail.com |     54.0000 | 2022-12-02 05:26:19 |
| odevelopement+513194@gmail.com  |     54.0000 | 2022-12-02 06:03:13 |
| odevelopement+312506@gmail.com  |     99.6000 | 2022-12-05 05:17:14 |
| odevelopement+9833520@gmail.com |     54.0000 | 2022-12-05 05:21:10 |
| odevelopement+7854345@gmail.com |     54.0000 | 2022-12-05 05:23:28 |
| odevelopement+3173295@gmail.com |     54.0000 | 2022-12-05 06:00:12 |
| odevelopement+6614899@gmail.com |     99.6000 | 2022-12-06 05:18:11 |
| odevelopement+9678938@gmail.com |     54.0000 | 2022-12-06 05:22:14 |
| odevelopement+6495988@gmail.com |     54.0000 | 2022-12-06 05:24:13 |
```

2.3

```
| 2022-11-03 06:37:06 |   1108297 | odevelopement+7262306@gmail.com                | 2023-01     |          1 |    105.4000 |
| 2022-11-03 06:43:48 |   1108301 | odevelopement+1367796@gmail.com                | 2023-01     |          1 |     54.0000 |
| 2022-10-06 06:08:48 |   1106413 | odevelopement+1578289@gmail.com                | 2023-01     |          1 |     54.0000 |
| 2022-08-11 09:05:10 |   1103562 | odevelopement+3750650@gmail.com                | 2023-01     |          1 |    105.4000 |
| 2022-10-06 06:40:11 |   1106428 | odevelopement+5859368@gmail.com                | 2023-01     |          1 |    105.4000 |
+---------------------+-----------+------------------------------------------------+-------------+-------------+-------------+
8312 rows in set (0.09 sec)

mysql>
```

SELECT customer_entity.created_at AS customer_created_at, customer_entity.entity_id, customer_entity.email,

DATE_FORMAT(sales_order.created_at, '%Y-%m') AS order_month,

COUNT(sales_order.entity_id) AS order_count,

SUM(sales_order.grand_total) AS order_total

FROM customer_entity

INNER JOIN sales_order ON customer_entity.entity_id = sales_order.customer_id

INNER JOIN store ON sales_order.store_id = store.store_id

WHERE store.store_id = 4 AND sales_order.status IN ('complete', 'processing', 'closed')

GROUP BY customer_created_at, customer_entity.entity_id, customer_entity.email, order_month