

**Step1:** Please go to <https://my.parallels.com/login> in your browser.

The screenshot shows the Parallels My Account Sign In page. At the top, there is a red header with the Parallels logo and "My Account". Below the header, there is a light orange banner with a cookie policy notice and a "Got It" button. The main content area is white and contains a "Sign In" form. The form has two radio buttons: "I have a password" (selected) and "I am a new user". Below these are input fields for "Email" and "Password" (with an eye icon for toggling visibility). A "Forgot password?" link is below the password field. A blue "Sign In" button is at the bottom of the form. To the right of the form, under "Other sign-in options:", there are three buttons: "Continue with Apple", "Continue with Facebook", and "Continue with Google". At the bottom of the page, there are links for "Legal Notices" and "Help with Sign In".

**Step2:** Please Sign in using the following credentials:

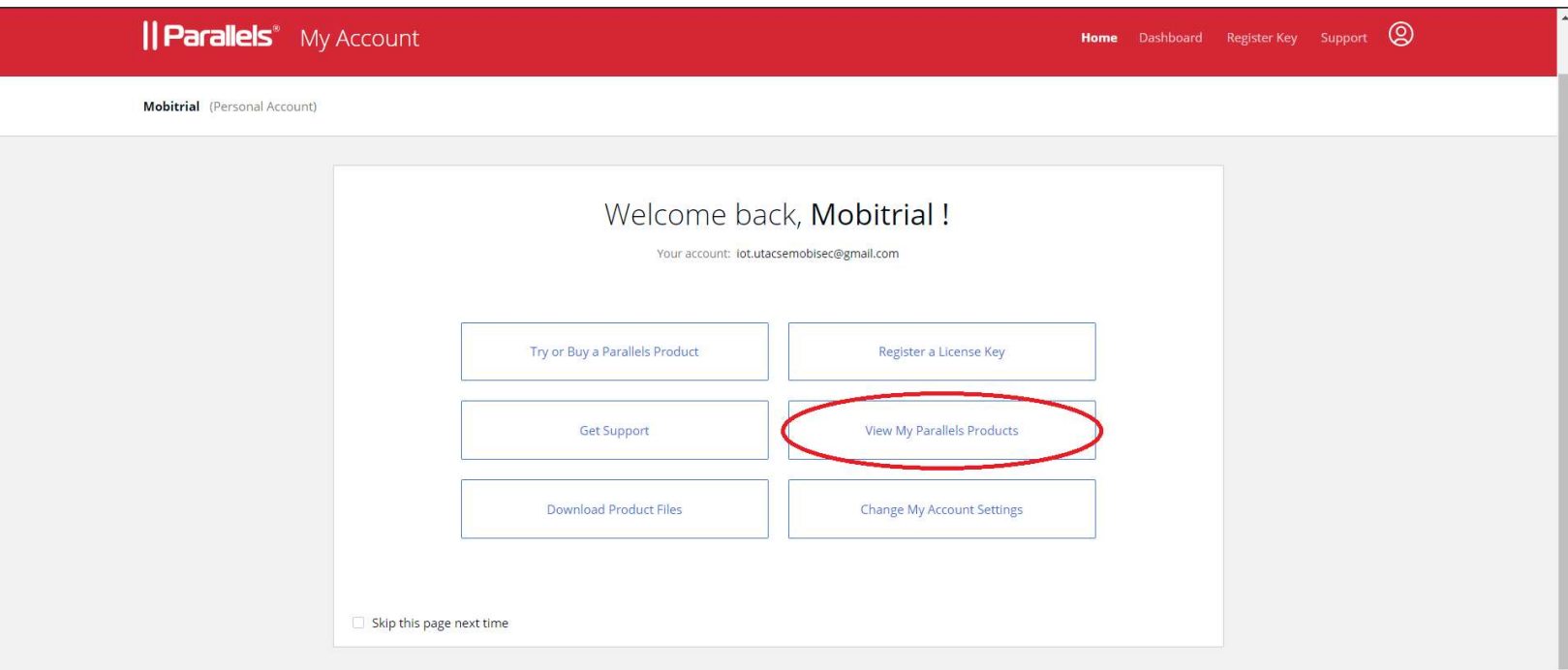
**Email:** [iot.utacsemobisec@gmail.com](mailto:iot.utacsemobisec@gmail.com)

**Password:** @\$#erb!0!cse@uta&\*

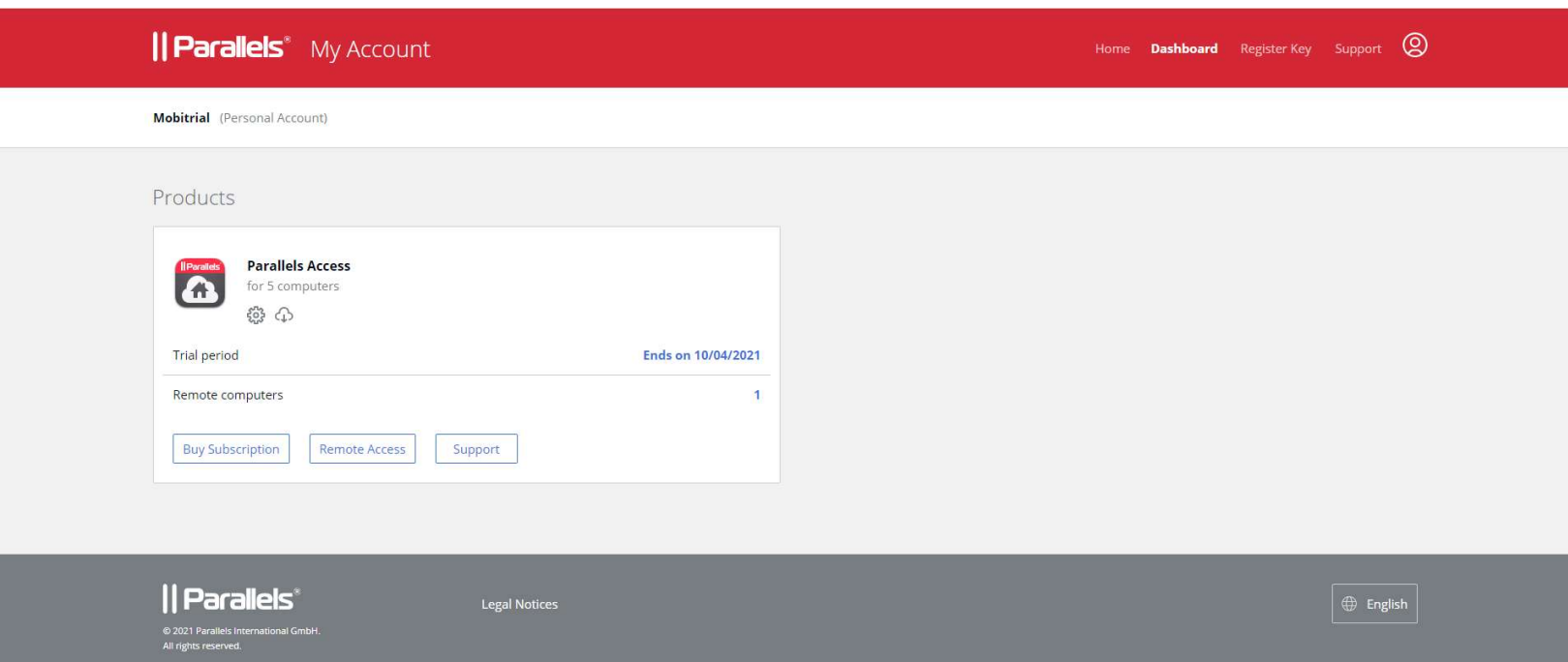
Upon signing in, the following image should be visible:

The screenshot shows the Parallels My Account dashboard after a successful login. The top red header contains the Parallels logo, "My Account", and navigation links: "Home", "Dashboard", "Register Key", "Support", and a user profile icon. Below the header, the user's name "Mobitrial" and "(Personal Account)" are displayed. The main content area is white and contains a "Welcome back, Mobitrial !" message with the account email "Your account: iot.utacsemobisec@gmail.com". Below the welcome message, there are six buttons arranged in a 3x2 grid: "Try or Buy a Parallels Product", "Register a License Key", "Get Support", "View My Parallels Products", "Download Product Files", and "Change My Account Settings". At the bottom of the main content area, there is a checkbox labeled "Skip this page next time". The footer is a dark gray bar with the Parallels logo, "Legal Notices", and a language selector set to "English".

**Step3:** Please click on: “View My Parallels Products”



**Step4:** Please make sure the following screen is visible






**Step5:** Please click on “Remote computers”



Mobitrial (Personal Account)

## Products

**Parallels Access**  
for 5 computers



Trial period Ends on 10/04/2021

**Remote computers** 1

[Buy Subscription](#) [Remote Access](#) [Support](#)

**Step6:** The following screen should be visible:



Dashboard > **Parallels Access**

My Computers (1)

Other Computers (0)

Product Subscriptions (0)

Download

Settings

Support

## My Computers

[Add Personal Computer](#)

cse124761 



**Step7:** Please click on the blue right arrow

My Computers

[Add Personal Computer](#)cse124761 

**Step8:** Upon clicking the blue right arrow, another tab opens automatically with the following screen



Wenqiang Jin



sharing\_screen



Other...

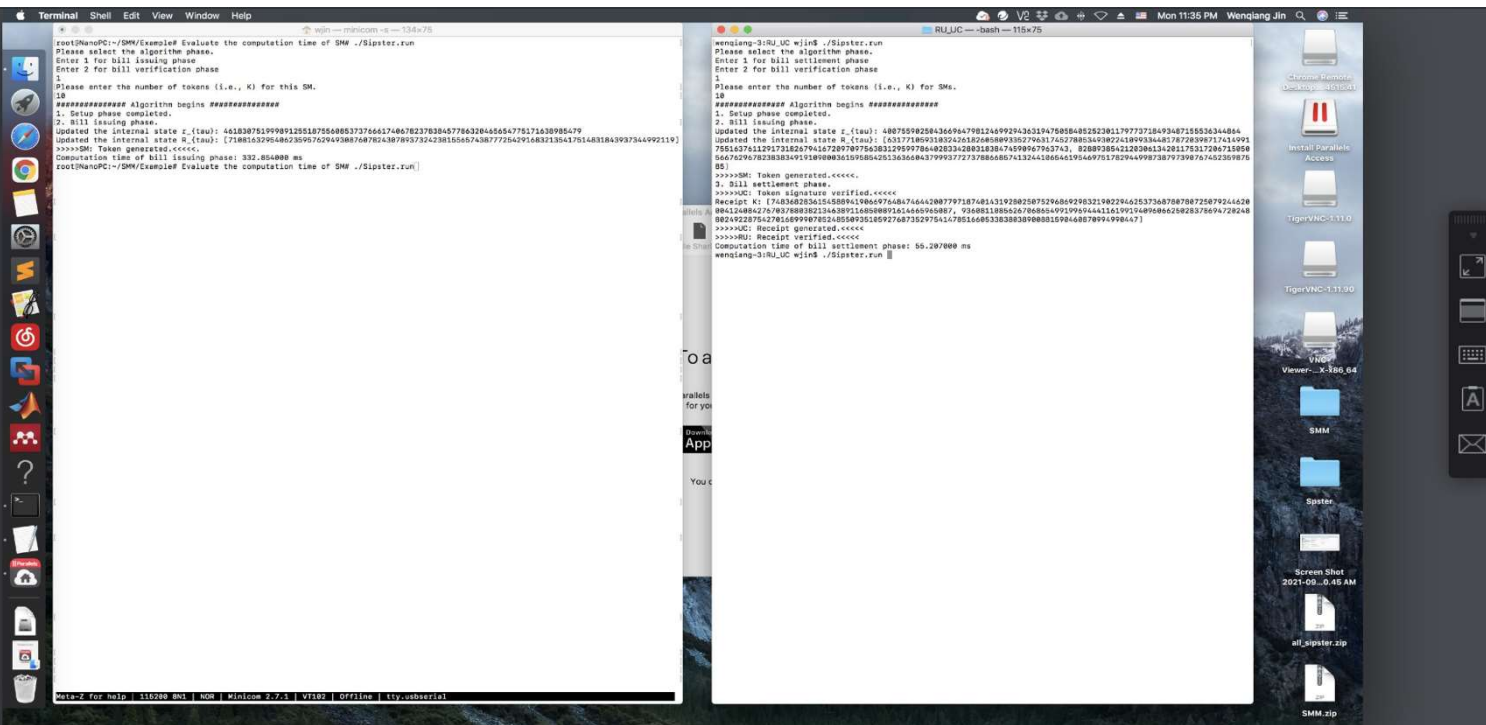
**Step9:** Please click on the User Account named “Wenqiang Jin”. You should be asked for the password.

Please enter the following password in the popped up dialog box as shown in the figure and press “Login”:

**Password: cse@uta**



**Step10:** The following screen should appear after a few minutes. This is the screen of the computer connected to the prototype.

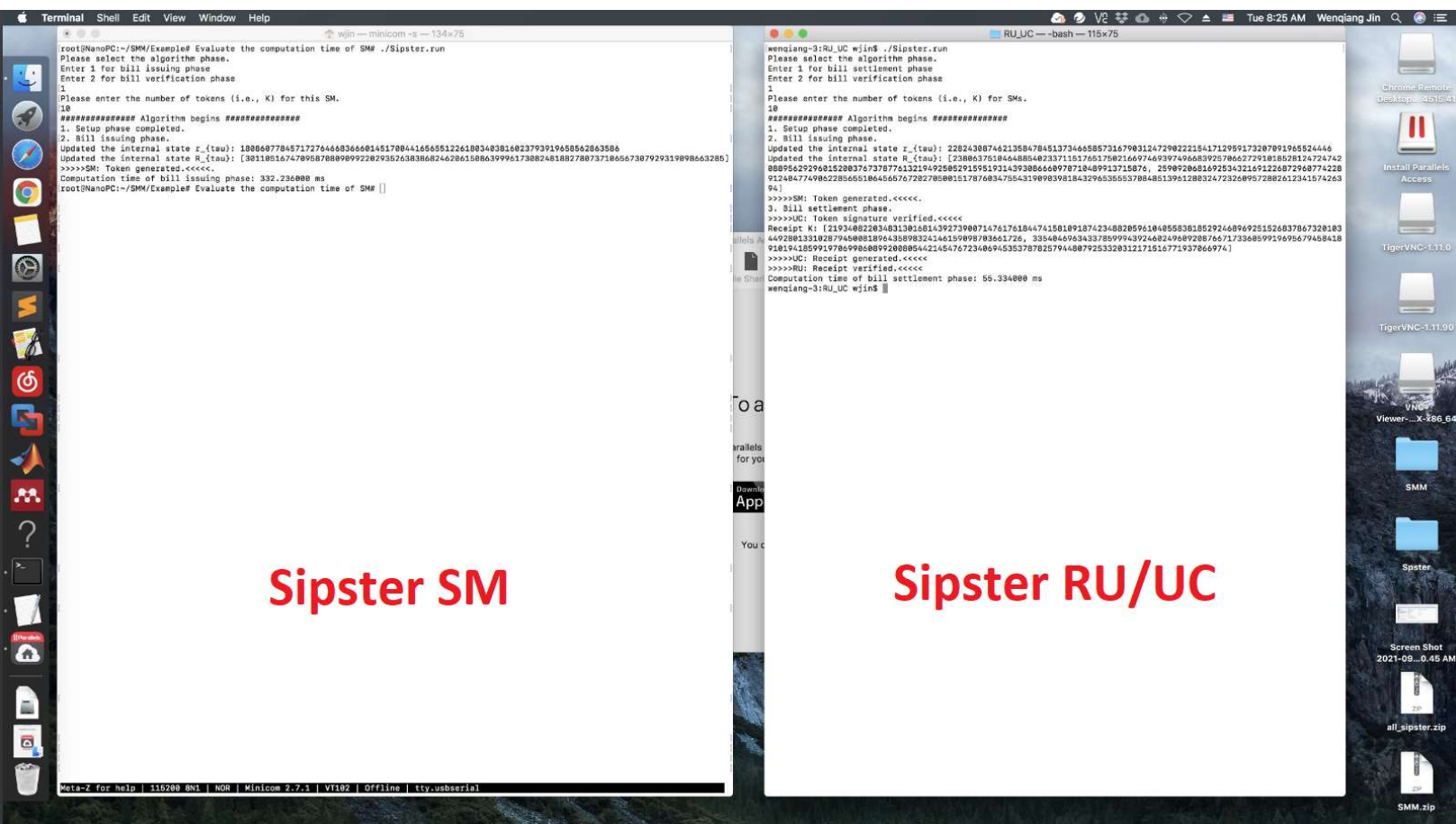


Note: Sometimes, there may be a lag when loading the screen. Please wait for 1-2 minutes, if the image shown below does not appear.

If the screen is still grayed out after 1-2 minutes, please close the browser tab and repeat steps 7-10.

Please do not use any VPN services, as it may affect the screen from loading.

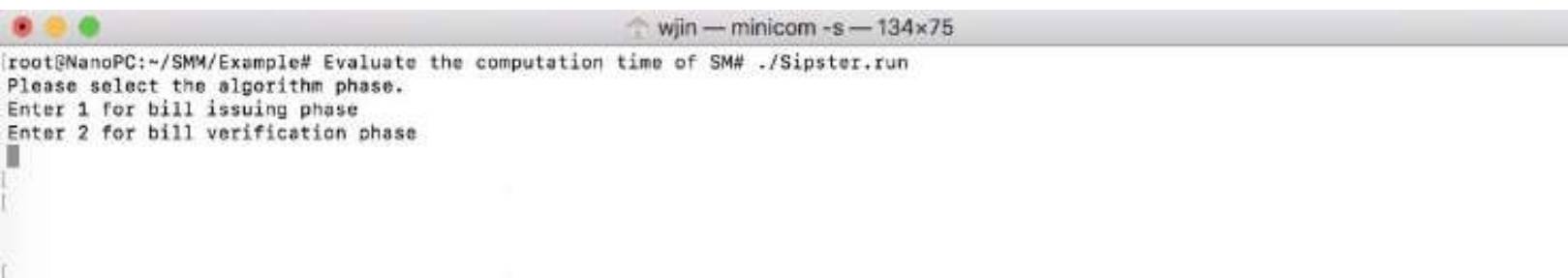
**Step11:** There should be 2 terminal windows as shown in the following figure. The left window with the Command Line “root@NanoPC” corresponds to the Sipster smart meter (SM) prototype. The right window corresponds to the Sipster residential user/utility company (RU/UC).



**Step12:** To run the program on Sipster SM Terminal, please click on the relevant window and make sure the present working directory is `/root/SMM/Example# Evaluate the computation time of SM`

After this please enter: `./Sipster.run`

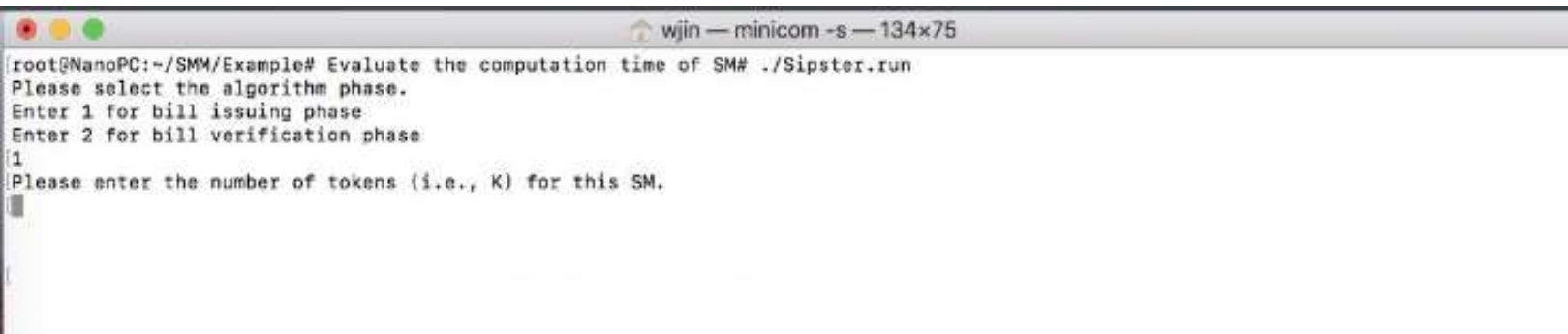
The following image should be displayed:



```
wjin — minicom -s — 134x75
root@NanoPC:~/SMM/Example# Evaluate the computation time of SM# ./Sipster.run
Please select the algorithm phase.
Enter 1 for bill issuing phase
Enter 2 for bill verification phase
```

**Step13:** For running a test case on the Sipster SM prototype, the following screen should be visible:

Note: Sometimes, the keystroke may not be received correctly. For example, the value of '1' maybe received on the system in a wrong format, like `^[0q`.



```
wjin — minicom -s — 134x75
root@NanoPC:~/SMM/Example# Evaluate the computation time of SM# ./Sipster.run
Please select the algorithm phase.
Enter 1 for bill issuing phase
Enter 2 for bill verification phase
1
Please enter the number of tokens (i.e., K) for this SM.
```

If you encounter that, please use

**'Ctrl + option + desired numerical value'** – if you are running macOS

**'Ctrl + shift + desired numerical value'** – if you are running MS Windows

This same case applies to all wrongly received keystrokes.

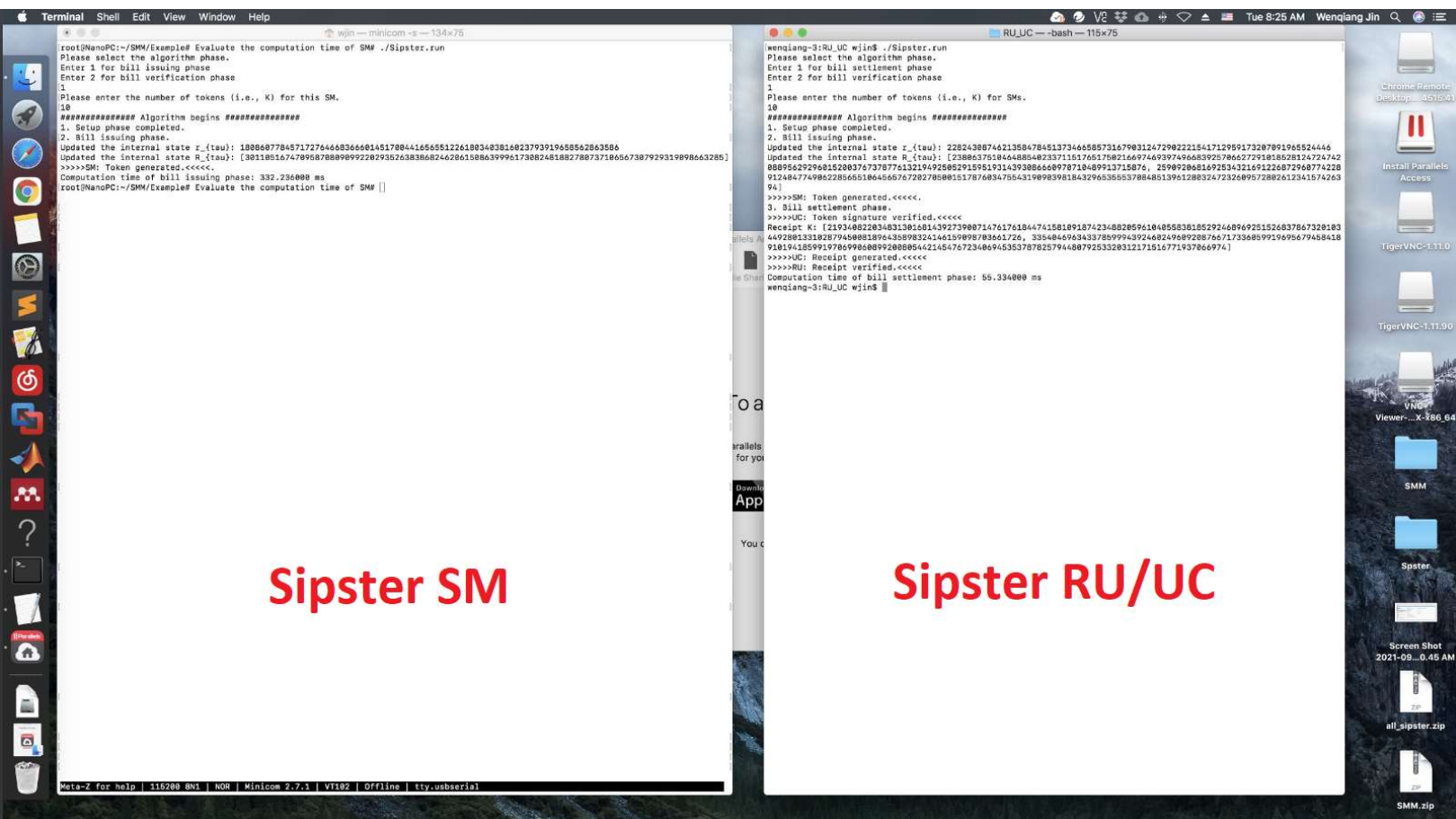


**Step14:** Once the testing parameters are entered. The following screen should be visible:

```
wjin — minicom -s — 134x75
root@NanoPC:~/SMM/Example# Evaluate the computation time of SM# ./Sipster.run
Please select the algorithm phase.
Enter 1 for bill issuing phase
Enter 2 for bill verification phase
1
Please enter the number of tokens (i.e., K) for this SM.
10
##### Algorithm begins #####
1. Setup phase completed.
2. Bill issuing phase.
Updated the internal state r_{tau}: 1808607784571727646683666014517804416565512261803403816023793919658562863586
Updated the internal state R_{tau}: [30118516747095870809092202935263838682462061508639996173082481882780737106567307929319098663285]
>>>>SM: Token generated.<<<<.
Computation time of bill issuing phase: 332.236000 ms
root@NanoPC:~/SMM/Example# Evaluate the computation time of SM#
```

With Step14, the process for testing the program on the Sipster SM prototype is completed.

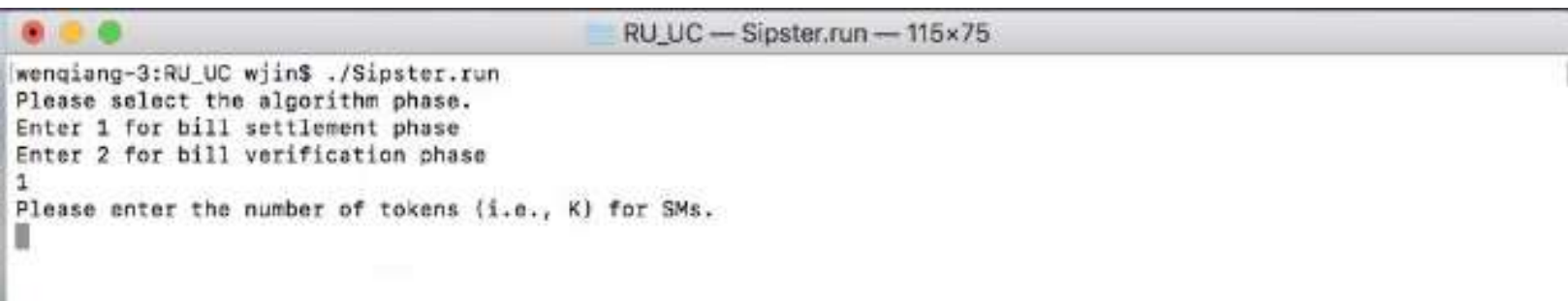
**Step15:** To run the program on the Sipster RU/UC, please click on the relevant terminal window (right window), as shown in the figure below:





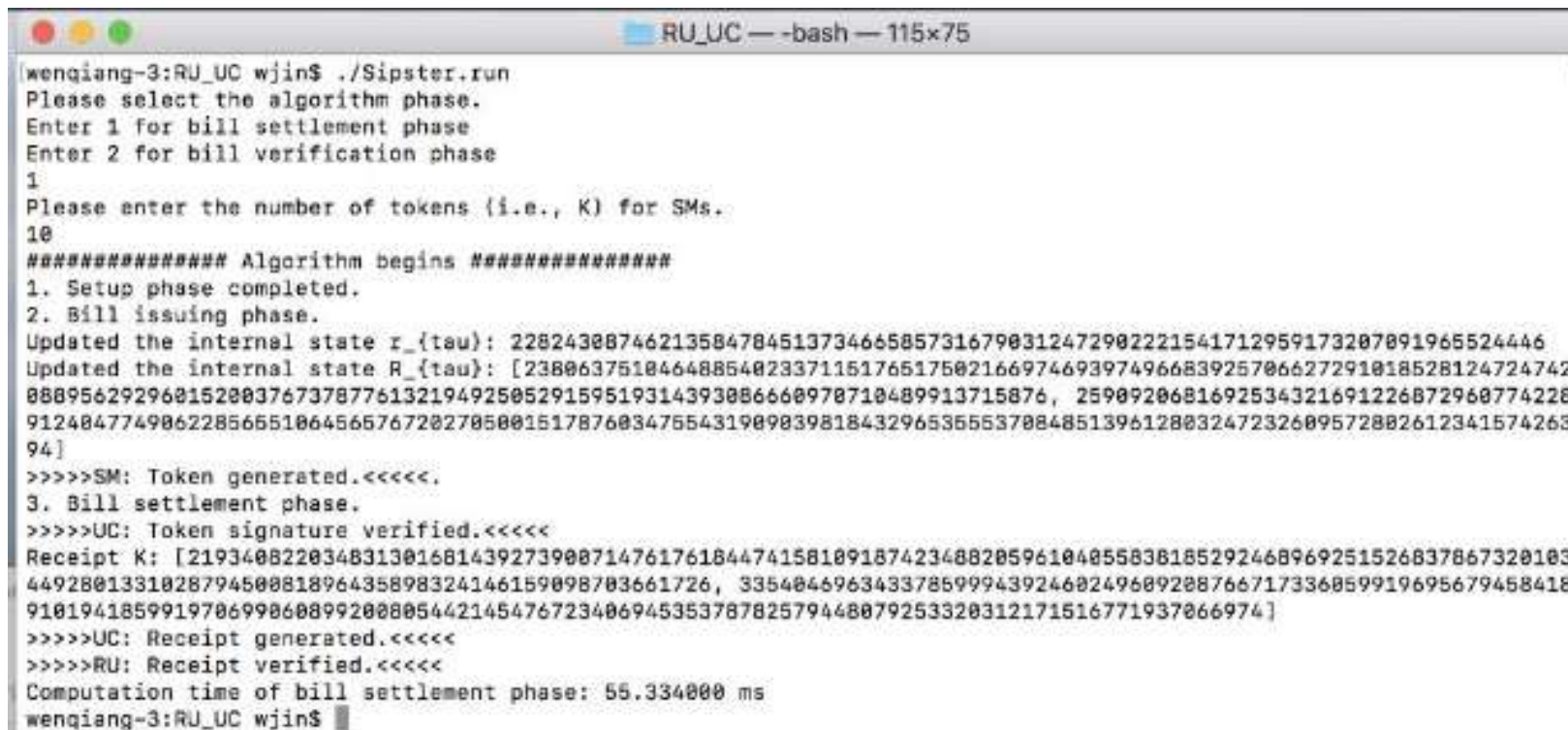
**Step16:** Please make sure the present working directory is : `/Users/wjin/Desktop/SMM/RU_UC`

Please enter `./Sipster.run` to start the program.



```
wenqiang-3:RU_UC wjin$ ./Sipster.run
Please select the algorithm phase.
Enter 1 for bill settlement phase
Enter 2 for bill verification phase
1
Please enter the number of tokens (i.e., K) for SMs.
1
```

**Step17:** Once the testing parameters are entered. The following screen should be visible:

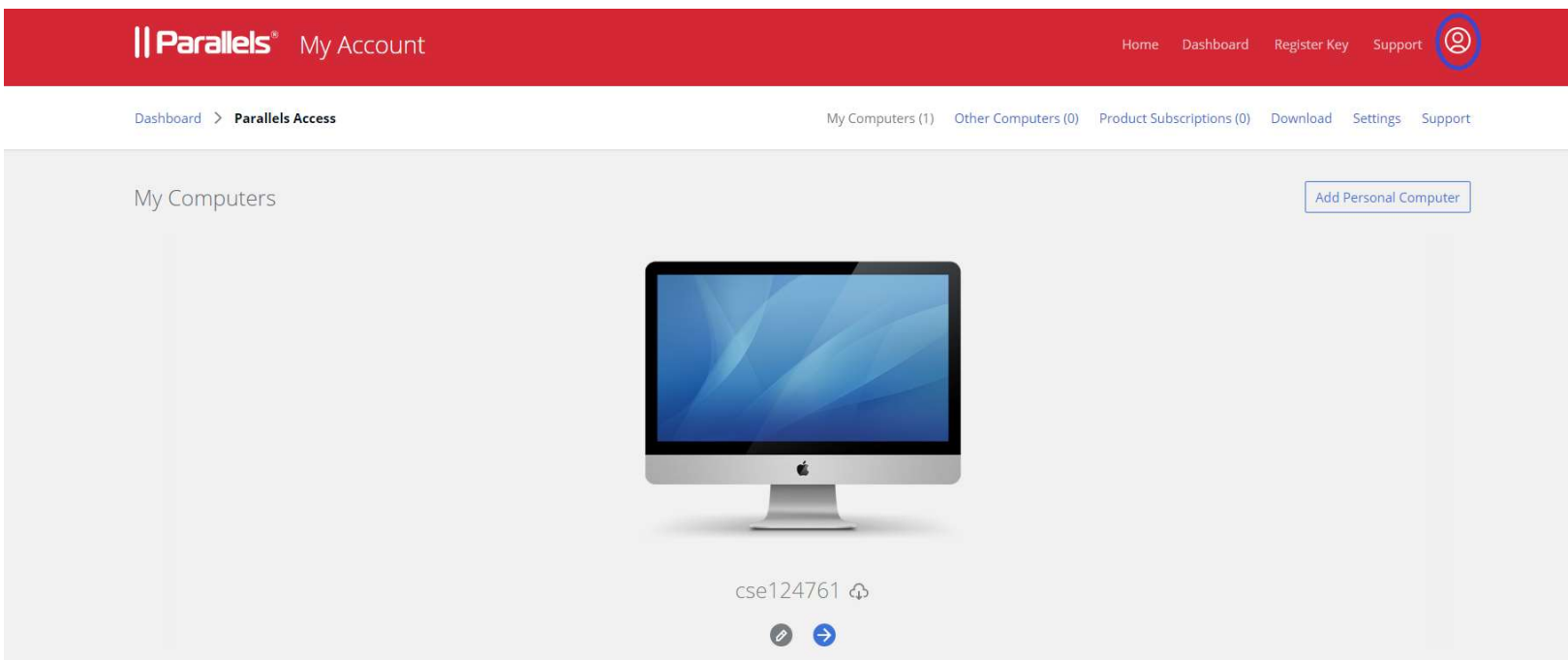


```
wenqiang-3:RU_UC wjin$ ./Sipster.run
Please select the algorithm phase.
Enter 1 for bill settlement phase
Enter 2 for bill verification phase
1
Please enter the number of tokens (i.e., K) for SMs.
10
##### Algorithm begins #####
1. Setup phase completed.
2. Bill issuing phase.
Updated the internal state r_{tau}: 22824308746213584784513734665857316790312472902221541712959173207091965524446
Updated the internal state R_{tau}: [238063751046488540233711517651750216697469397496683925706627291018528124724742
0889562929601520037673787761321949250529159519314393086660970710489913715876, 2590920681692534321691226072960774228
9124047749062285665106456676720270500151787603476543190903981843296535553708485139612803247232609572802612341574263
94]
>>>>SM: Token generated.<<<<<.
3. Bill settlement phase.
>>>>UC: Token signature verified.<<<<<
Receipt K: [2193408220348313016814392739007147617618447415810918742348820596104055838185292468969251526837867320103
449280133102879450081896435898324146159098703661726, 33540469634337859994392460249609208766717336059919695679458418
91019418599197069906089920080544214547672340694535378782579448079253320312171516771937066974]
>>>>UC: Receipt generated.<<<<<
>>>>RU: Receipt verified.<<<<<
Computation time of bill settlement phase: 55.334000 ms
wenqiang-3:RU_UC wjin$
```

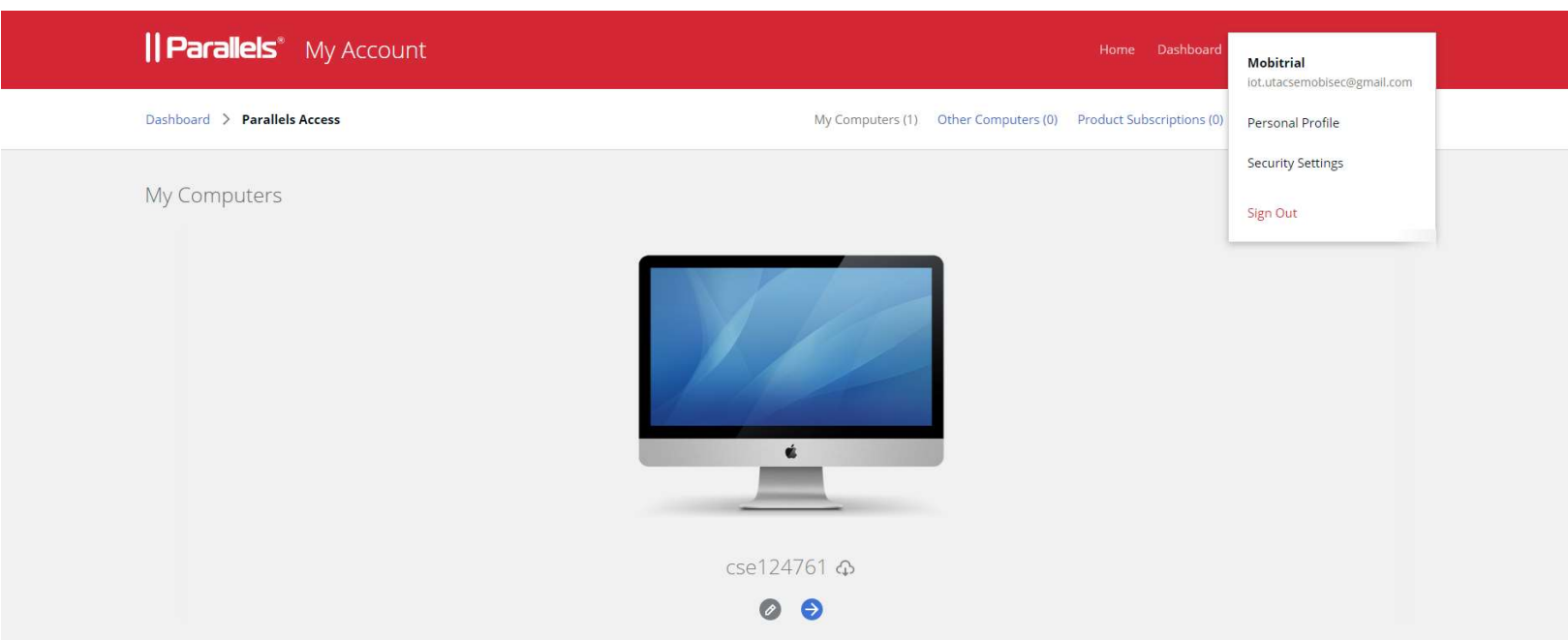
With Step17, the process for testing the program on the Sipster RU/UC devices is completed.

If you wish to log out of the session, please simply close the current browser tab.

**Step18:** In the previous tab, to log out of the Parallels Access user account please click on the user icon on the top right corner, as shown in the figure.



**Step19:** Please click on “Sign Out”



**Step20:** The entire process has been completed.