

[illegible]

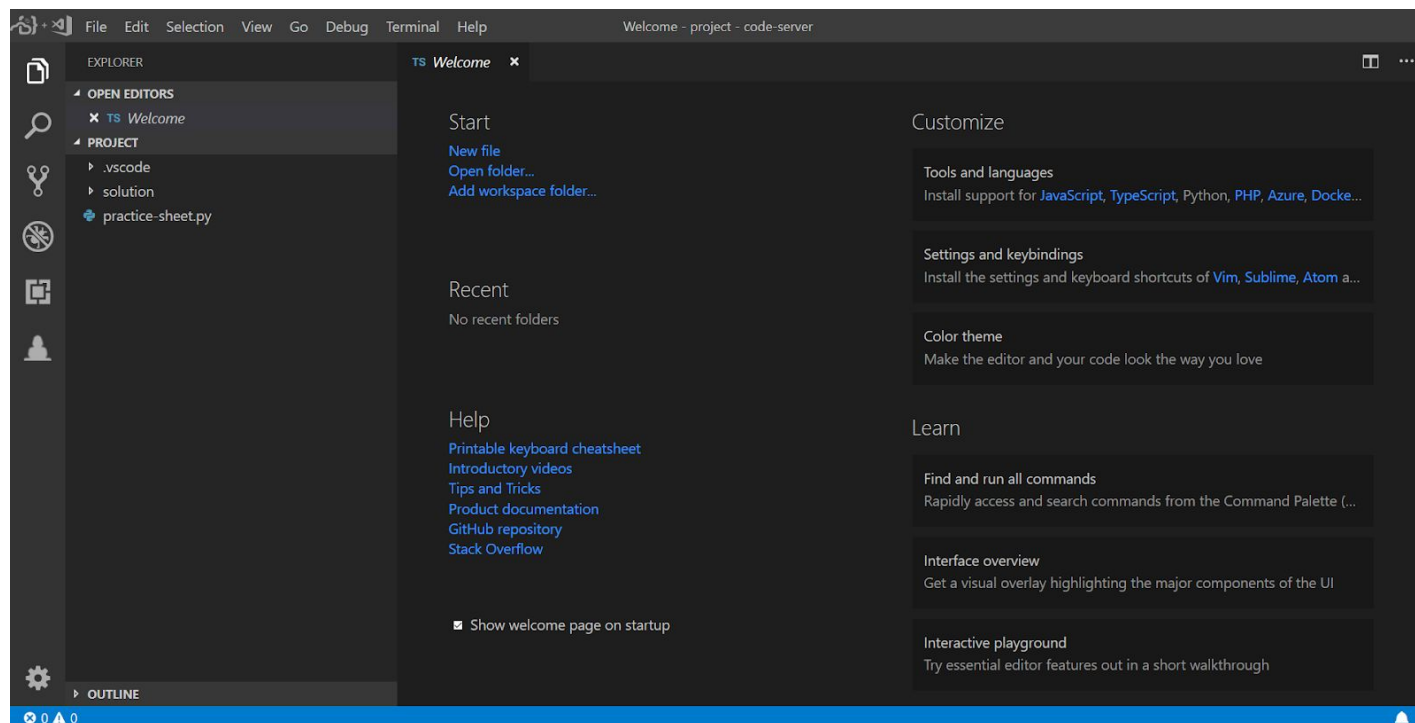
<b>Name</b>	Samba Client Emulation I
<b>URL</b>	<a href="https://attackdefense.com/challengedetails?cid=1216">https://attackdefense.com/challengedetails?cid=1216</a>
<b>Type</b>	Offensive Python : Client Emulation

**Important Note:** This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic. Also, note that the IP addresses and domain names might be different in your lab.

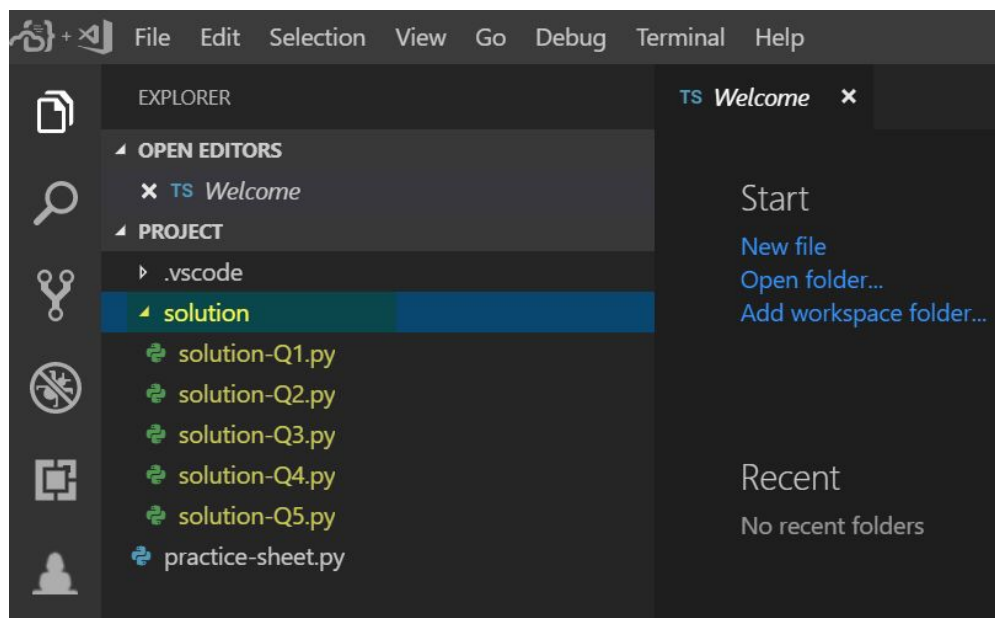
**Objective:** Use Python impacket library to interact with the samba server and perform the mentioned task.

**Solution:**

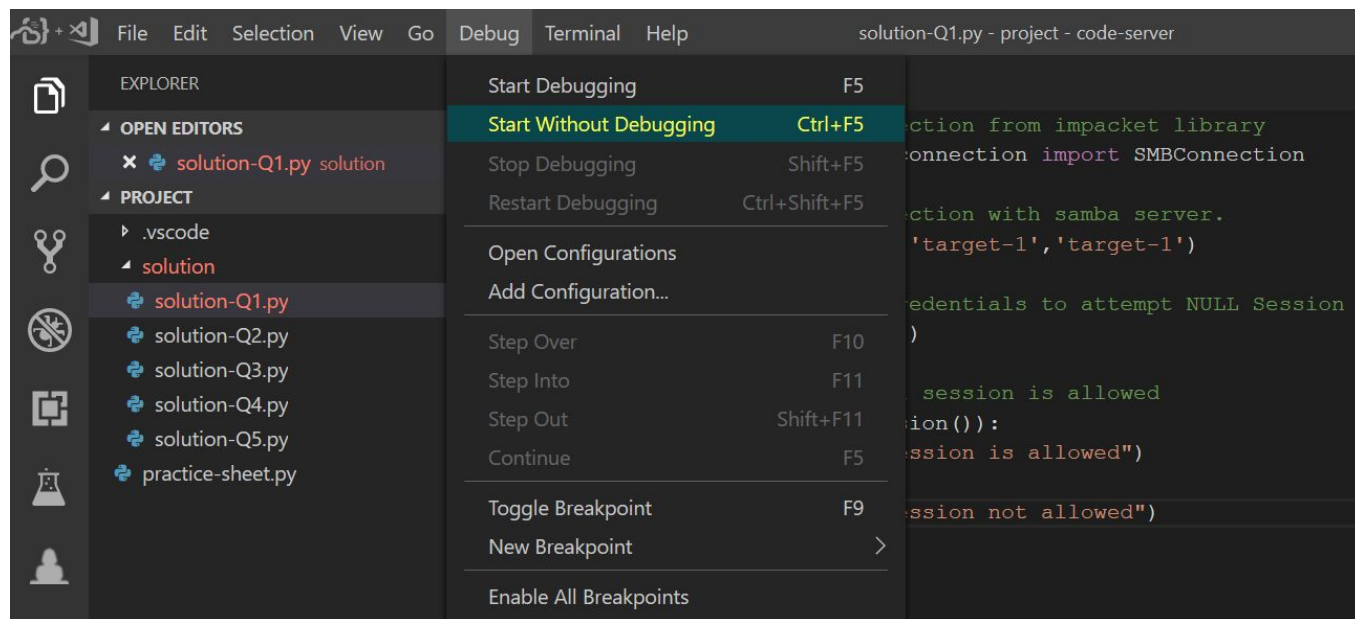
**Landing Page:**



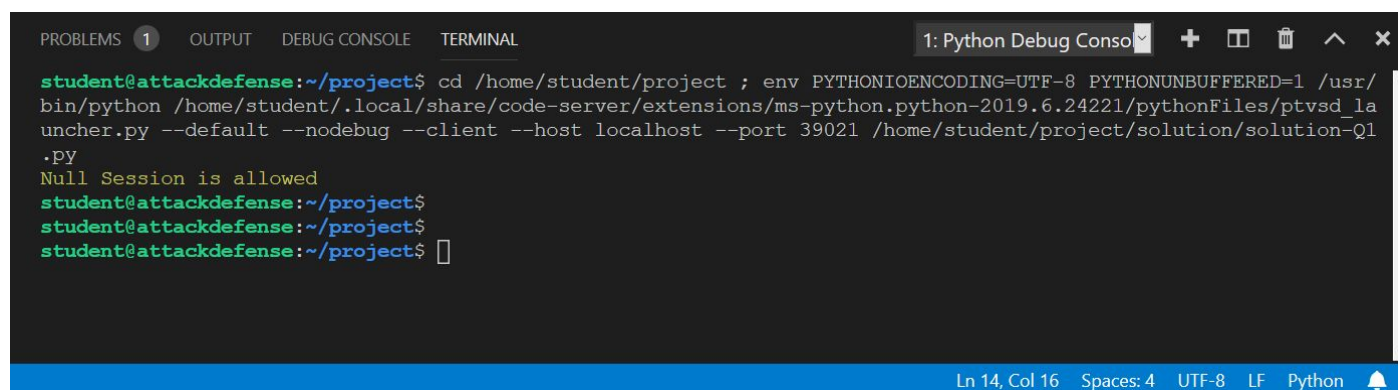
**Step 1:** Solutions code for all five tasks is given under the solution directory listed in Project Explorer.



**Step 2:** Open solution-Q1.py. Navigate to Debug Menu and click on “Start Without Debugging option”.



The python script will be executed and the output will be displayed on the integrated terminal. In this case, the python script checks whether null session is allowed and returns the output “Null session is allowed”.

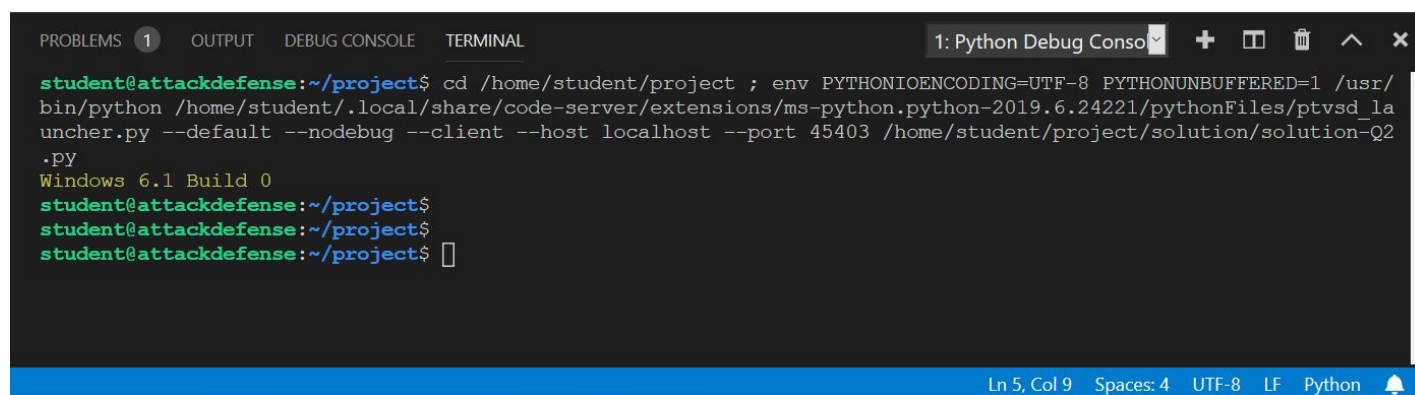


```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL 1: Python Debug Conso + [ ] [ ] ^ x
student@attackdefense:~/project$ cd /home/student/project ; env PYTHONIOENCODING=UTF-8 PYTHONUNBUFFERED=1 /usr/
bin/python /home/student/.local/share/code-server/extensions/ms-python.python-2019.6.24221/pythonFiles/ptvsd_la
uncher.py --default --nodebug --client --host localhost --port 39021 /home/student/project/solution/solution-Q1
.py
Null Session is allowed
student@attackdefense:~/project$
student@attackdefense:~/project$
student@attackdefense:~/project$
```

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**Step 3:** Similarly, open solution code for other tasks and run the code to see the output.

a. **solution-Q2.py:** Retrieve samba server OS version information.



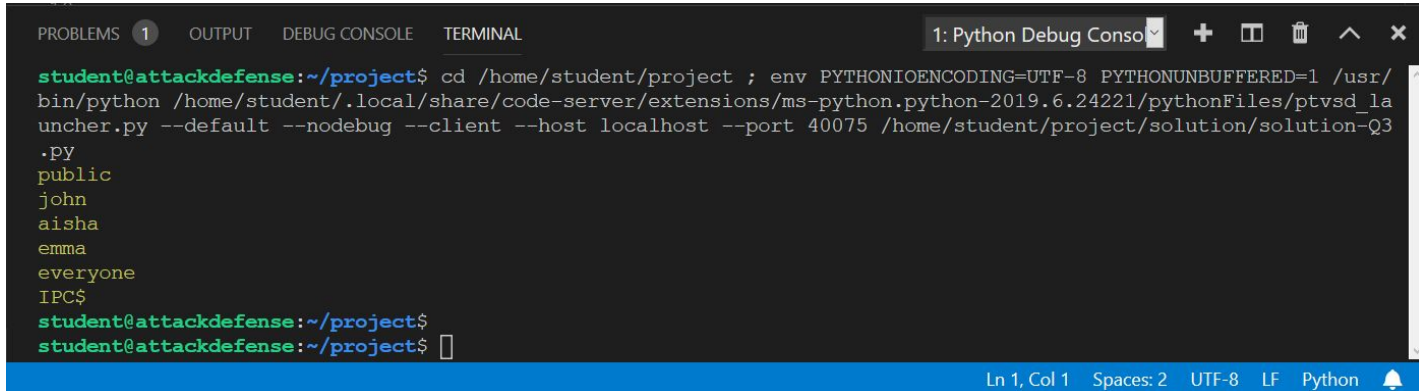
```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL 1: Python Debug Conso + [ ] [ ] ^ x
student@attackdefense:~/project$ cd /home/student/project ; env PYTHONIOENCODING=UTF-8 PYTHONUNBUFFERED=1 /usr/
bin/python /home/student/.local/share/code-server/extensions/ms-python.python-2019.6.24221/pythonFiles/ptvsd_la
uncher.py --default --nodebug --client --host localhost --port 45403 /home/student/project/solution/solution-Q2
.py
Windows 6.1 Build 0
student@attackdefense:~/project$
student@attackdefense:~/project$
student@attackdefense:~/project$
```

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The samba server OS version is “Windows 6.1 Build 0”.



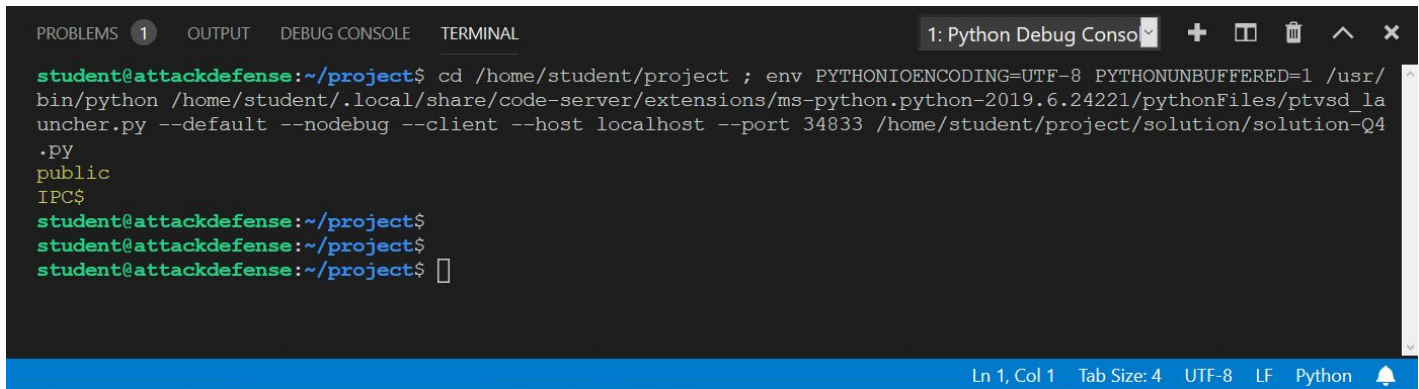
b. **solution-Q3.py:** List the name of the shares on the samba server.



```
student@attackdefense:~/project$ cd /home/student/project ; env PYTHONIOENCODING=UTF-8 PYTHONUNBUFFERED=1 /usr/bin/python /home/student/.local/share/code-server/extensions/ms-python.python-2019.6.24221/pythonFiles/ptvsd_launcher.py --default --nodebug --client --host localhost --port 40075 /home/student/project/solution/solution-Q3.py
public
john
aisha
emma
everyone
IPC$
student@attackdefense:~/project$
student@attackdefense:~/project$
```

There are 6 shares on the samba server: public, john, aisha, emma, everyone and IPC\$

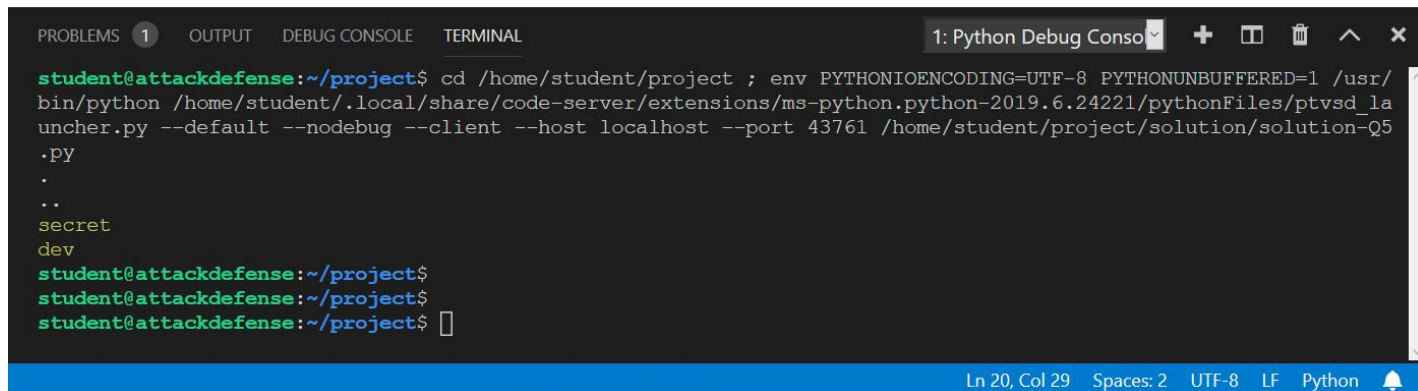
c. **solution-Q4.py:** Identify the shares which can be accessed by everyone on the network.



```
student@attackdefense:~/project$ cd /home/student/project ; env PYTHONIOENCODING=UTF-8 PYTHONUNBUFFERED=1 /usr/bin/python /home/student/.local/share/code-server/extensions/ms-python.python-2019.6.24221/pythonFiles/ptvsd_launcher.py --default --nodebug --client --host localhost --port 34833 /home/student/project/solution/solution-Q4.py
public
IPC$
student@attackdefense:~/project$
student@attackdefense:~/project$
student@attackdefense:~/project$
```

Share 'public' and 'IPC\$' are accessible by everyone on the network.

d. **solution-Q5.py:** List the name of directories in the share 'public'.



```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL 1: Python Debug Console + [ ] [ ] ^ X
student@attackdefense:~/project$ cd /home/student/project ; env PYTHONIOENCODING=UTF-8 PYTHONUNBUFFERED=1 /usr/
bin/python /home/student/.local/share/code-server/extensions/ms-python.python-2019.6.24221/pythonFiles/ptvsd_la
uncher.py --default --nodebug --client --host localhost --port 43761 /home/student/project/solution/solution-Q5
.py
.
..
secret
dev
student@attackdefense:~/project$
student@attackdefense:~/project$
student@attackdefense:~/project$
```

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There are two directories in public share: secret and dev

## References:

1. Impacket (<https://github.com/SecureAuthCorp/impacket>)
2. Visual Studio Code (<https://code.visualstudio.com/>)
3. VS Code Basic Editing (<https://code.visualstudio.com/docs/editor/codebasics>)