

A screenshot of the Visual Studio Code interface. The left pane shows a code editor with a Python file named 'portScanner.py'. The code implements a simple port scanner. The right pane shows a terminal window displaying the execution of the script and its output.

```
portScanner.py > ...
31 |     print("No open ports found in this range.")
32 |
33 |
34 def main():
35     print("== Simple Port Scanner ==")
36     host = input("Enter target host (IP or domain): ").strip()
37     start = int(input("Start port: ").strip())
38     end = int(input("End port: ").strip())
39
40     if start < 1 or end > 65535 or start > end:
41         print("Invalid port range. Use 1-65535 and start <= end.")
42         return
43
44     scan_range(host, start, end)
45
46
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS D:\Cyber Security Tools> **python portScanner.py**
== Simple Port Scanner ==
Enter target host (IP or domain): 127.0.0.1
Start port: 1
End port: 1024

Scanning 127.0.0.1 from port 1 to 1024 ...
[+] Port 135 is OPEN
[+] Port 445 is OPEN
[+] Port 902 is OPEN
[+] Port 912 is OPEN

Scan complete.
Open ports: 135, 445, 902, 912

A screenshot of the Visual Studio Code interface, similar to the first one but with a syntax error in the terminal output. The code editor and file structure are identical. The terminal shows the script running, but it fails to execute due to a syntax error in the input command.

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45
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```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS D:\Cyber Security Tools> **python portScanner.py**
== Simple Port Scanner ==
Enter target host (IP or domain): 127.0.0.1
Start port: 1
End port: 66893
Invalid port range. Use 1-65535 and start <= end.
PS D:\Cyber Security Tools>

The screenshot shows a Visual Studio Code interface with the following details:

- Editor:** The main editor window displays the code for `portScanner.py`. The code is a simple port scanner that prompts the user for a target host, start port, and end port, then scans the specified range and prints open ports.
- Terminal:** The terminal tab shows the execution of the script: `PS D:\Cyber Security Tools> python portScanner.py`. It outputs the program's name, asks for a target host (192.168.0.110), and a port range (1 to 1024). It then scans the range and finds Port 22 is OPEN.
- Bottom Bar:** The bottom navigation bar includes tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL (which is underlined), and PORTS. On the right side of the bar are icons for Python, a plus sign, a dropdown arrow, a file icon, a trash icon, a three-dot ellipsis, and a close button.

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40     if start < 1 or end > 65535 or start > end:
41         print("Invalid port range. Use 1-65535 and start <= end.")
42         return
43
44     scan_range(host, start, end)
45
46
PS D:\Cyber Security Tools> python portScanner.py
== Simple Port Scanner ==
Enter target host (IP or domain): 192.168.0.110
Start port: 1
End port: 1024

Scanning 192.168.0.110 from port 1 to 1024 ...
[+] Port 22 is OPEN

Scan complete.
Open ports: 22
PS D:\Cyber Security Tools>
```