**gather\_switch\_inventory.txt**

from netmiko import ConnectHandler

# Switch details

device = {

'device\_type': 'cisco\_ios',

'host': '10.10.1.1', # Example IP address

'username': 'admin',

'password': 'password',

'secret': 'enable\_password', # Optional

'port': 22 # Default SSH port

}

try:

print(f"Connecting to {device['host']}...")

connection = ConnectHandler(\*\*device)

connection.enable() # Enter enable mode

print("Connection successful!")

# Collecting switch data (inventory)

output = connection.send\_command('show version')

print(output)

# Save inventory to a file

with open('switch\_inventory.txt', 'w') as f:

f.write(output)

connection.disconnect()

print("Connection closed. Inventory saved to switch\_inventory.txt")

except Exception as e:

print(f"Failed to connect to {device['host']}: {e}")