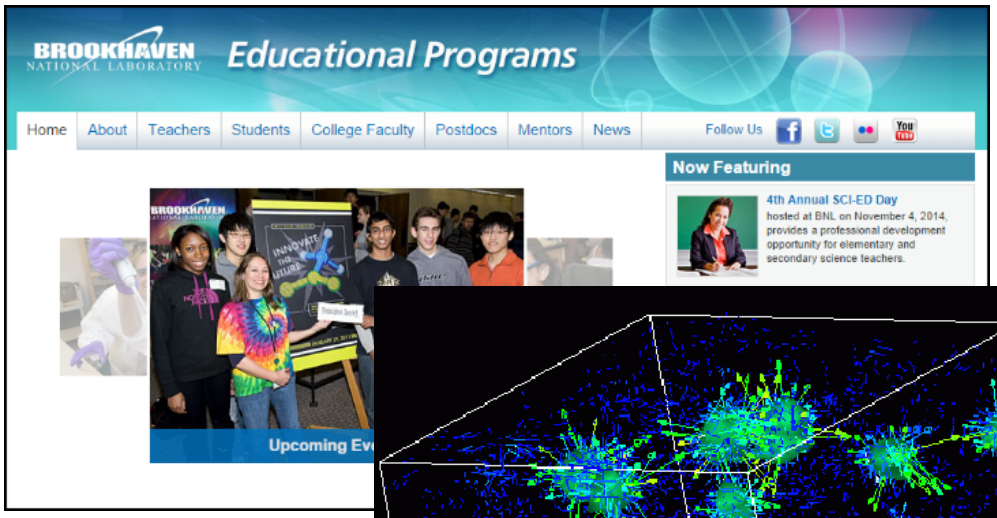
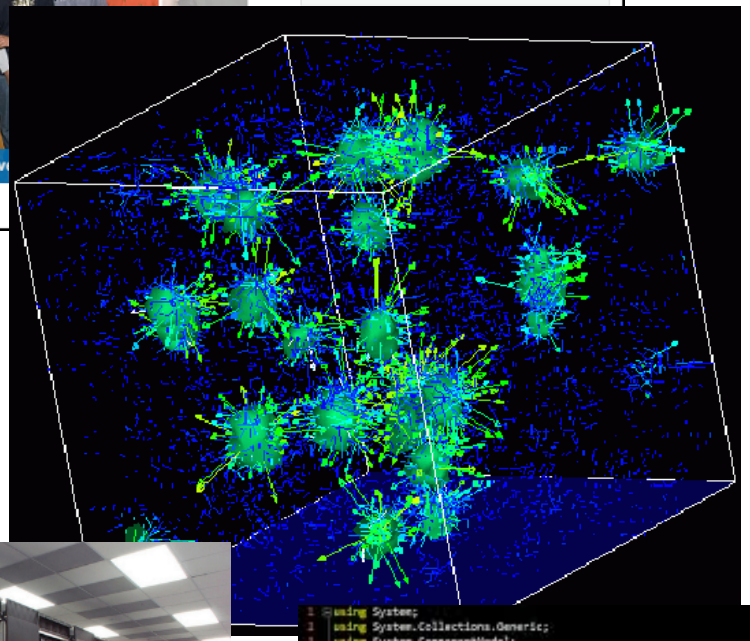
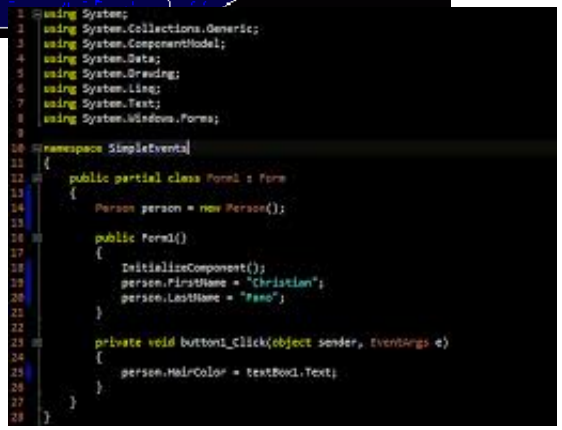






Survey of Scientific Computing (SciComp)

Unit 1

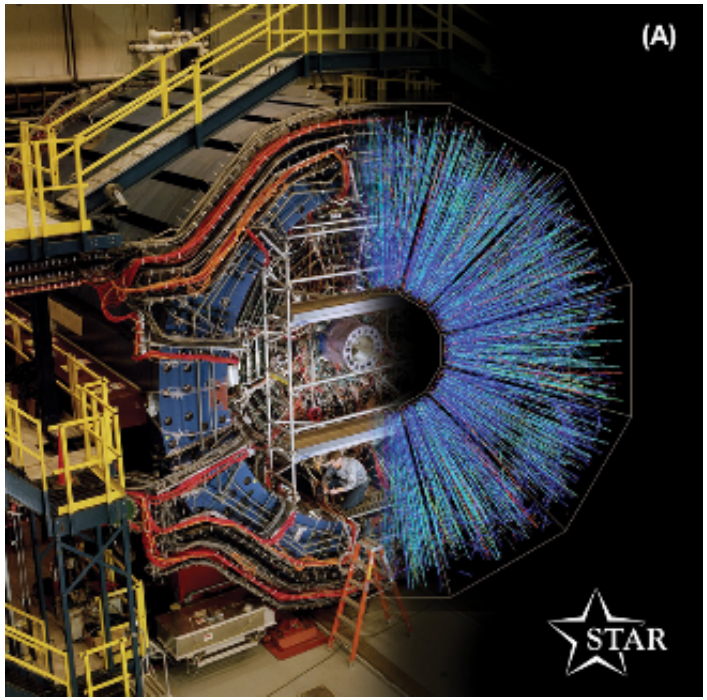
Remote Access

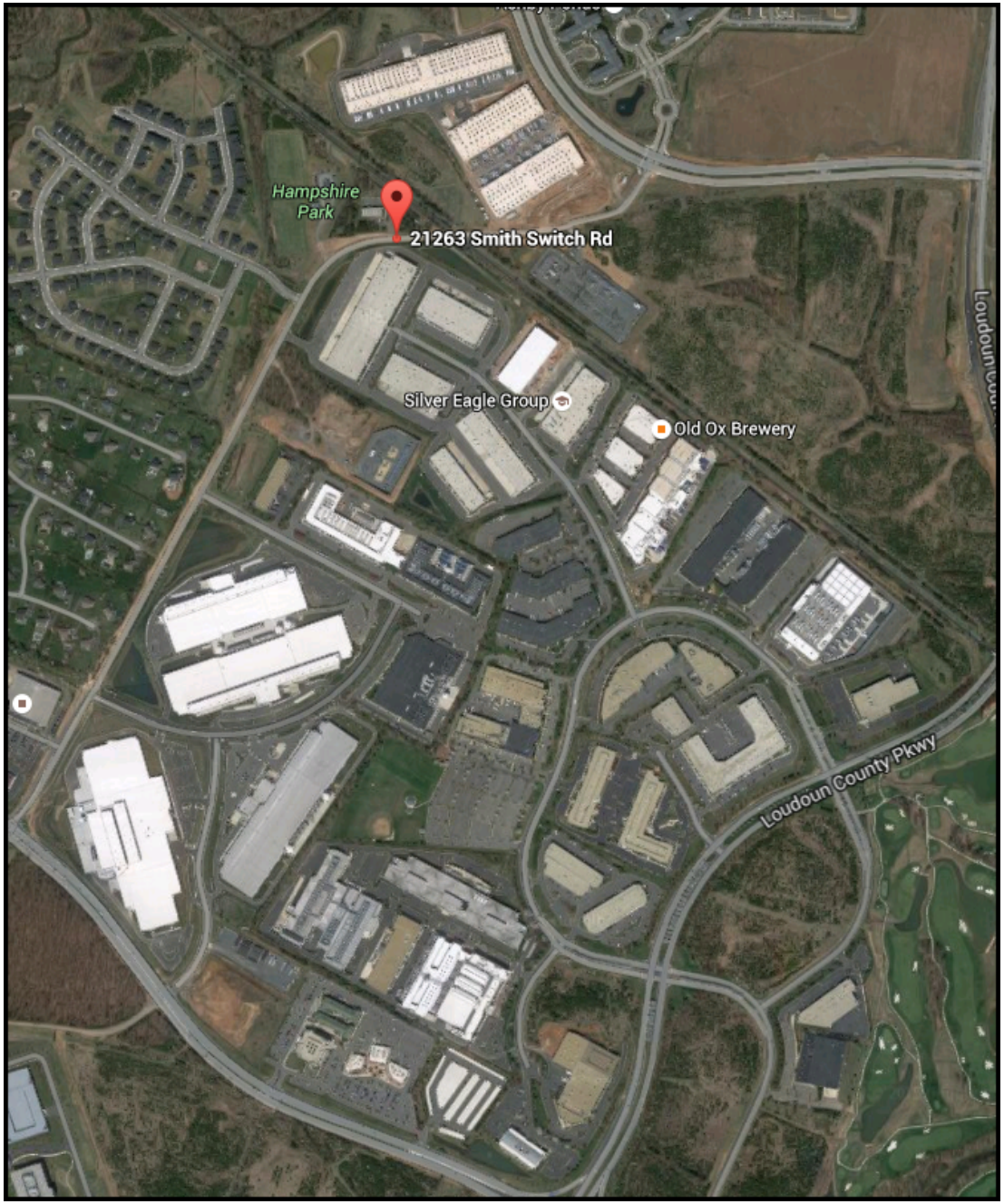
Goals

- Access **your** remote PC in Amazon's cloud
- Learning and Practicing commands in the terminal
- Learning to restart the remote PC

Scientific Computing in the Cloud

- The cloud is a great **equalizer**
- Allows participants to continue learning at home as on campus
- Cloud machines are fully isolated from school networks - eliminates local software installation restrictions & campus cybersecurity concerns
- Schools with low-end PC labs can still access thenewest generation of hardware



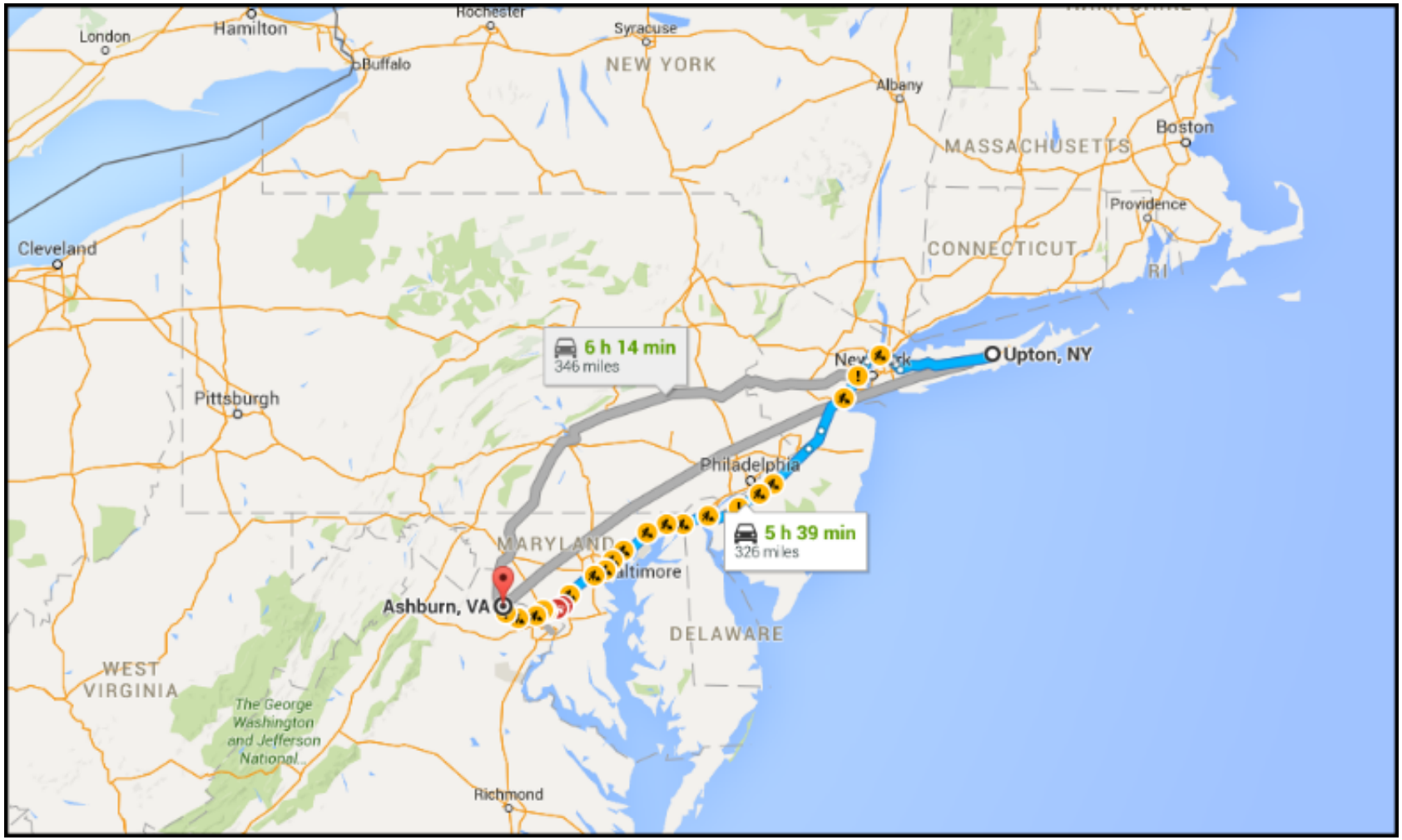


Amazon's
23 data centers in
Ashburn, Virginia

Just two of Amazon's 23 cloud data centers in Ashburn, Virginia

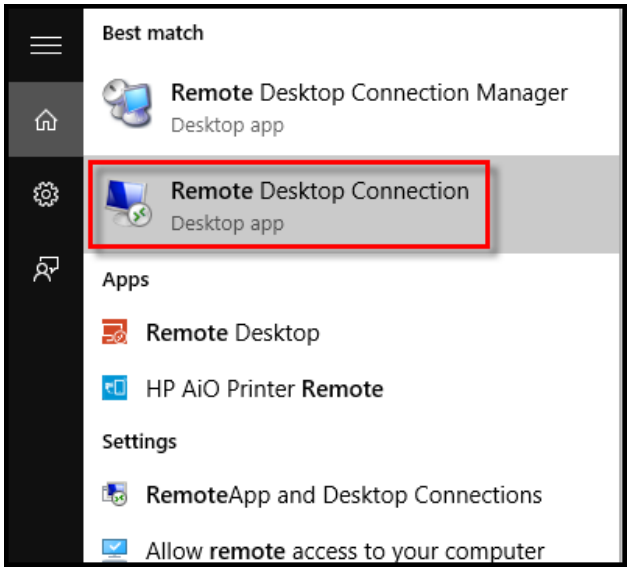
BNL ↔ Ashburn

Roundtrip = 660 miles



Accessing an Amazon Remote PC

- Uses Microsoft's "**Remote Desktop Connection**" application
- Students have assigned credentials
  - The IP address ***(computer name)*** of their specific machine in Amazon's cloud
  - Their user name (case sensitive!)
  - Their password (case sensitive!)
- Students can access their Amazon machine **from their home**
- Educators can remotely monitor student progress **real-time** on the lab exercises

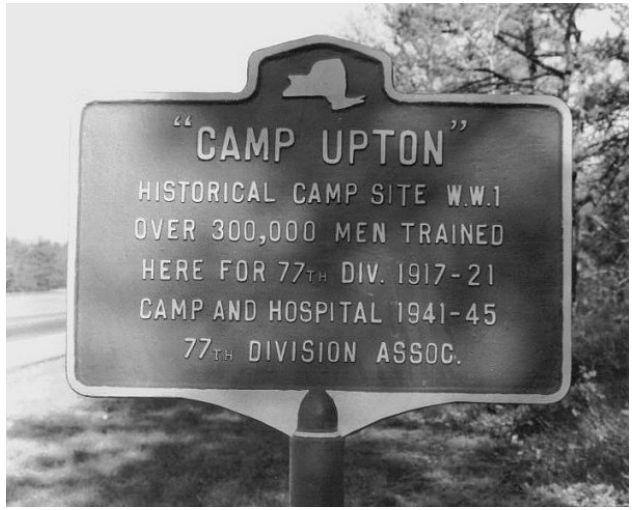


Accessing an Amazon Remote PC

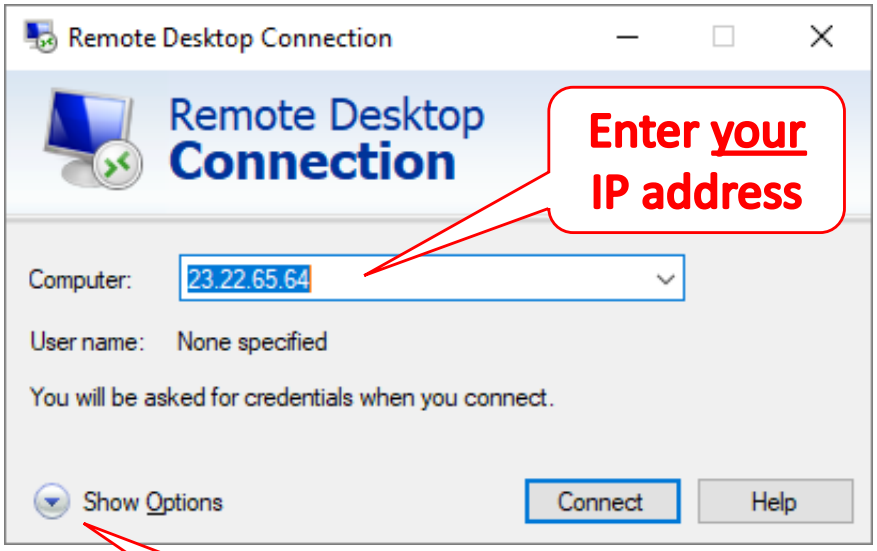
IP Address	Last Name	First Name
23.21.36.204		
23.22.65.64		
23.22.66.177		
23.22.77.143		
23.22.79.115		
23.23.69.92		
50.16.130.78		
50.16.135.127		
50.16.144.96		
50.16.147.112		
50.16.159.220		
50.16.160.201		
50.16.163.25		
50.16.163.117		
50.16.163.174		
50.16.165.70		
50.16.165.235		
50.16.170.168		
50.16.175.58		
50.16.175.233		

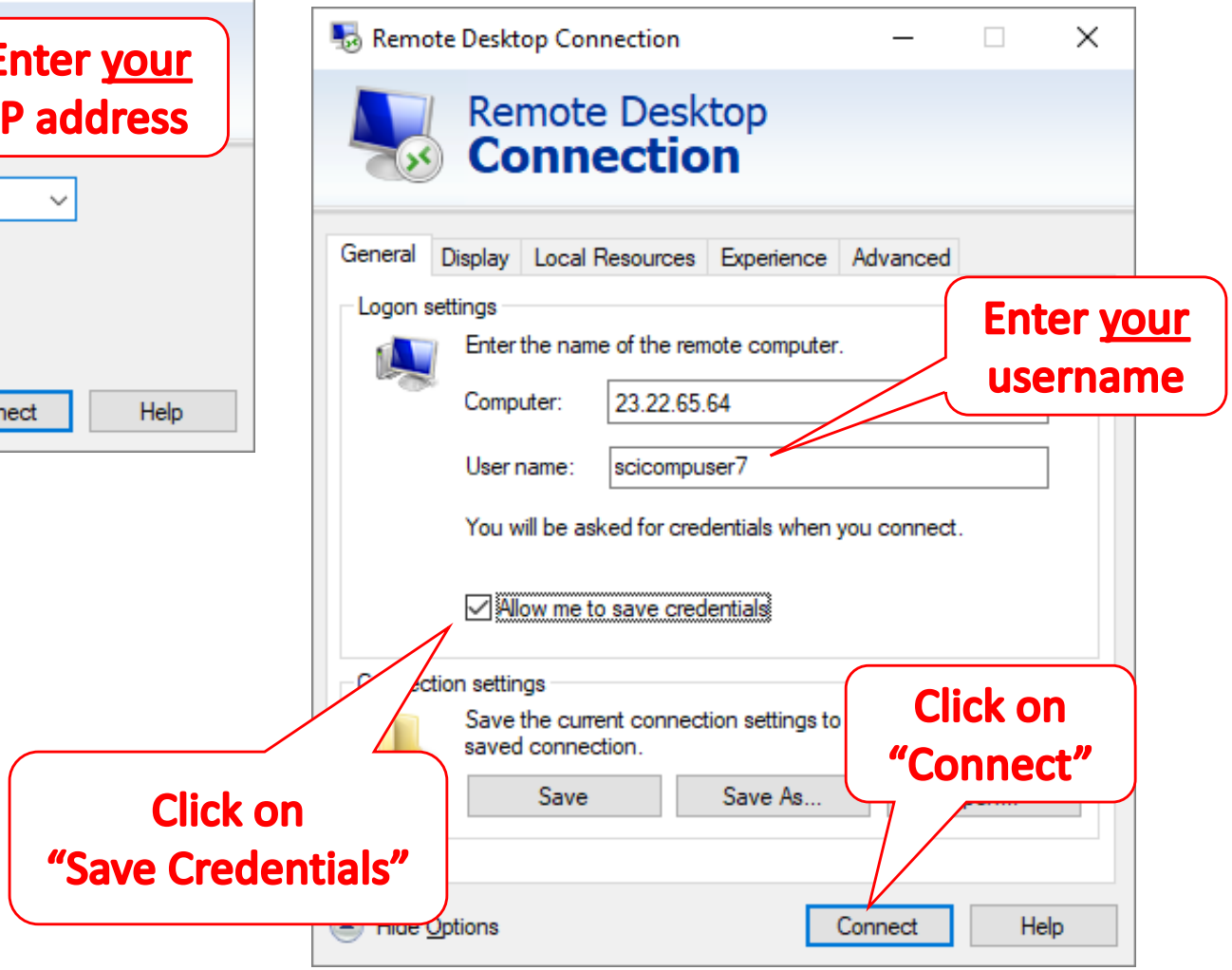
1. Write down your IP address, username, and password in your notebook

2. Take a picture of your login information to keep on your smart phone

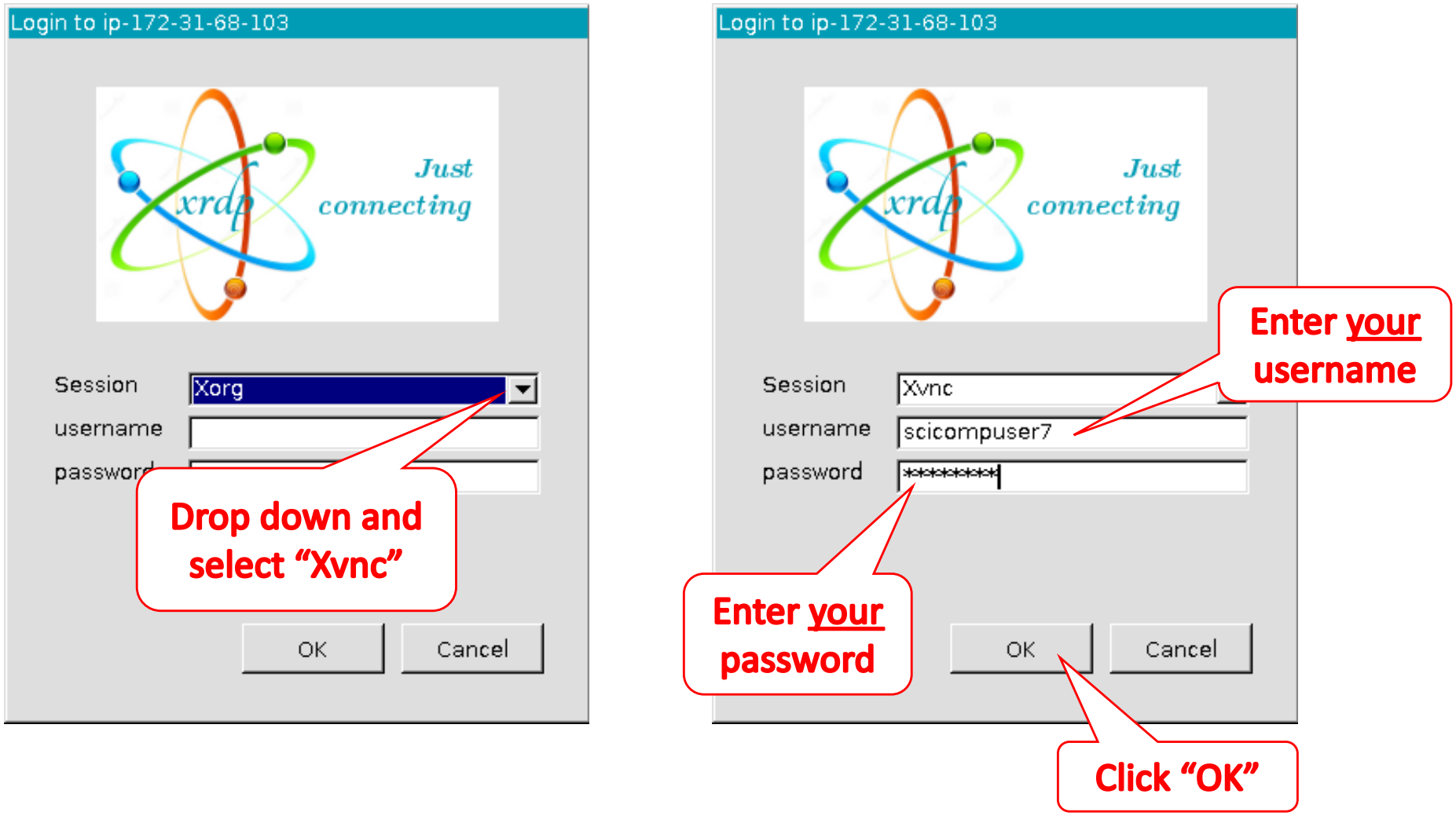


Accessing an Amazon Remote PC

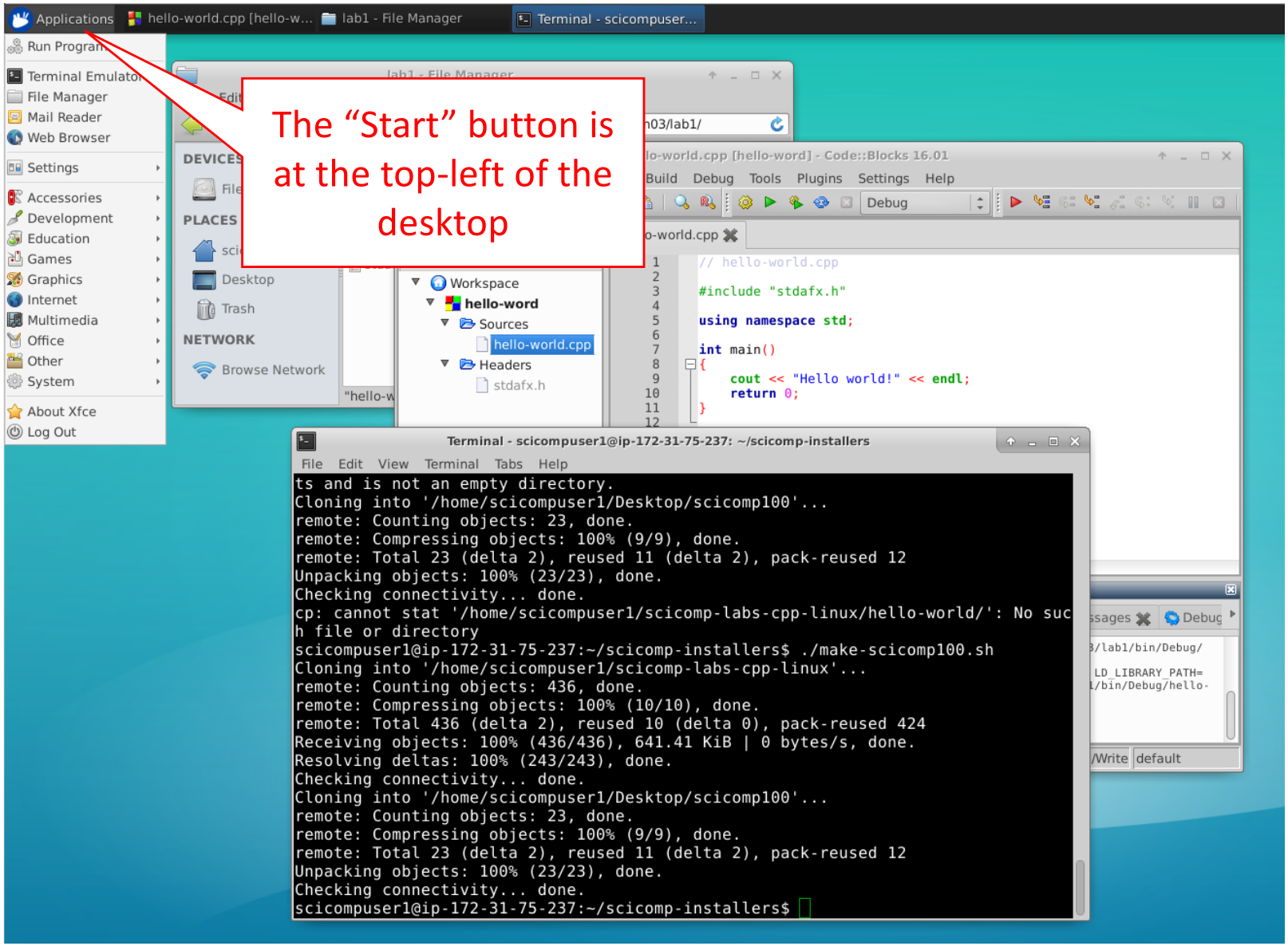




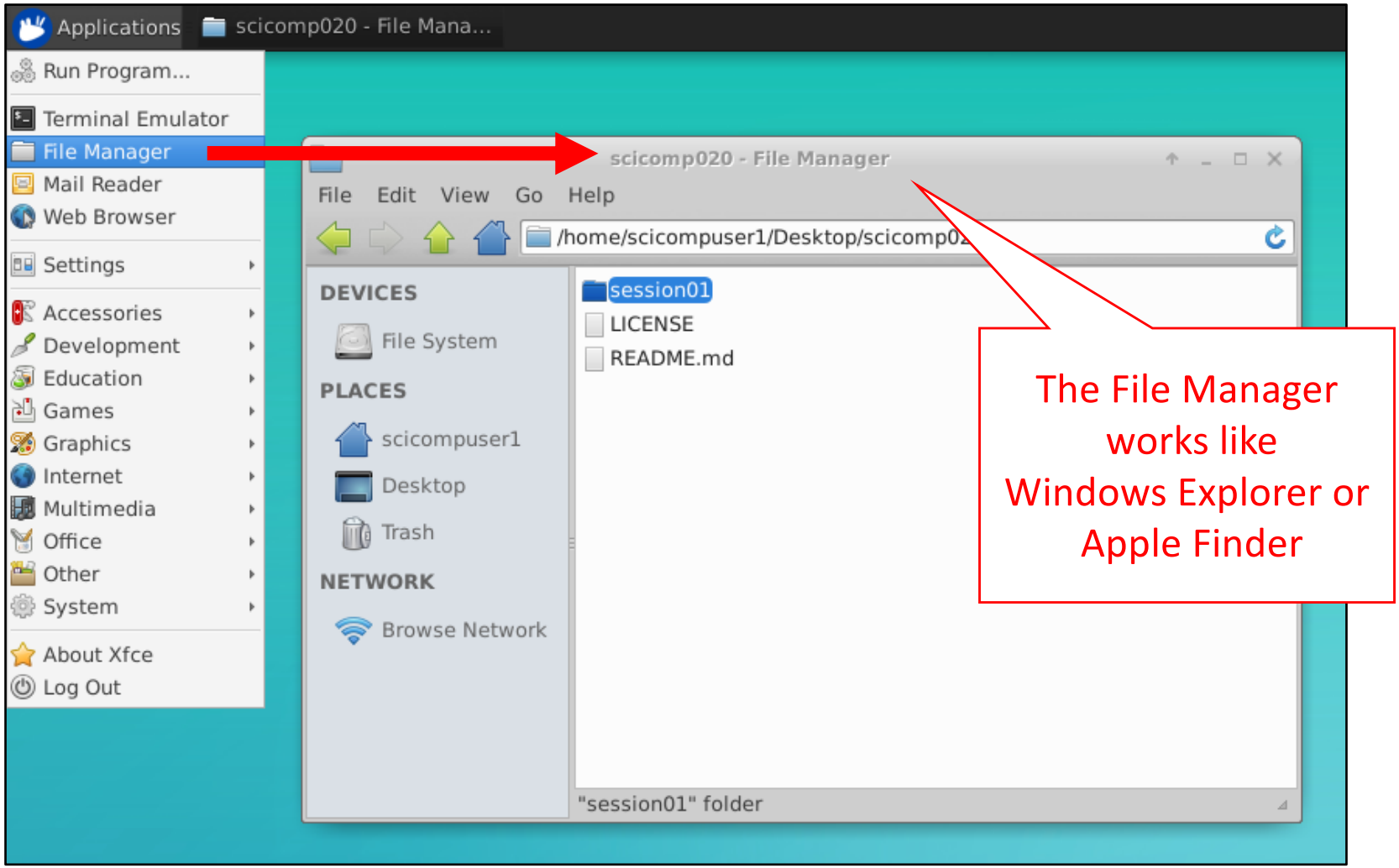
Accessing an Amazon Remote PC



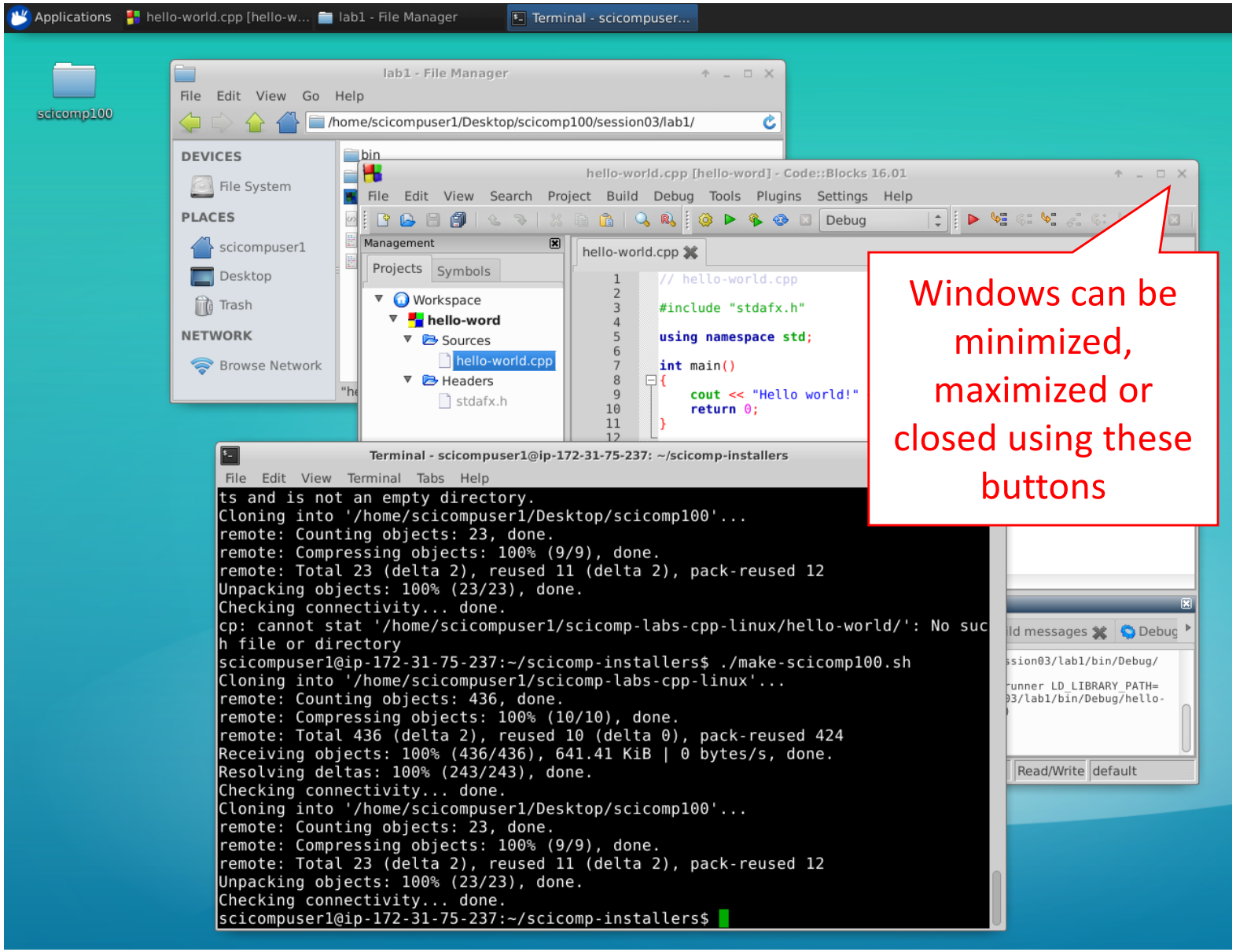
Ubuntu Linux with Xfce Desktop



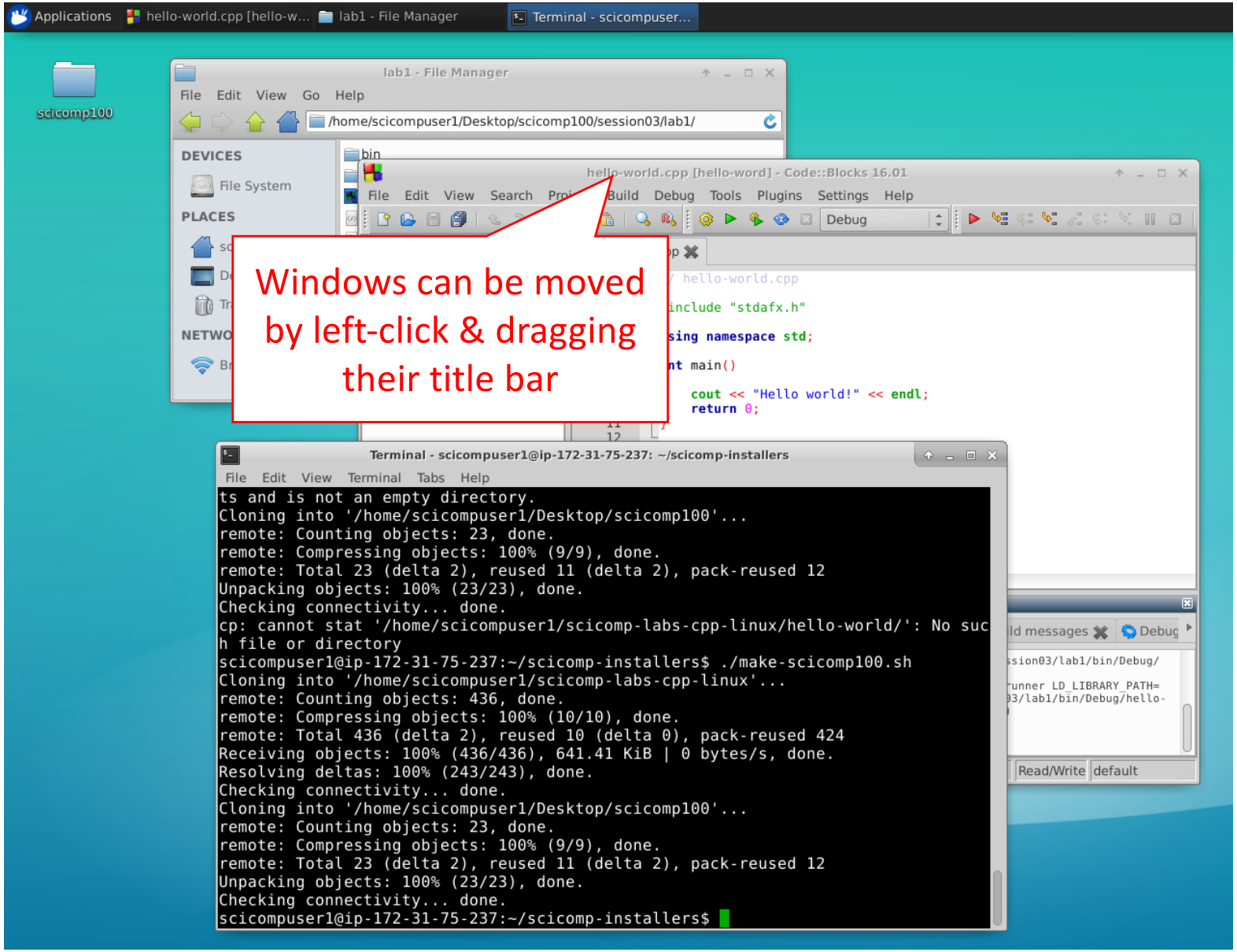
Ubuntu Linux with Xfce Desktop



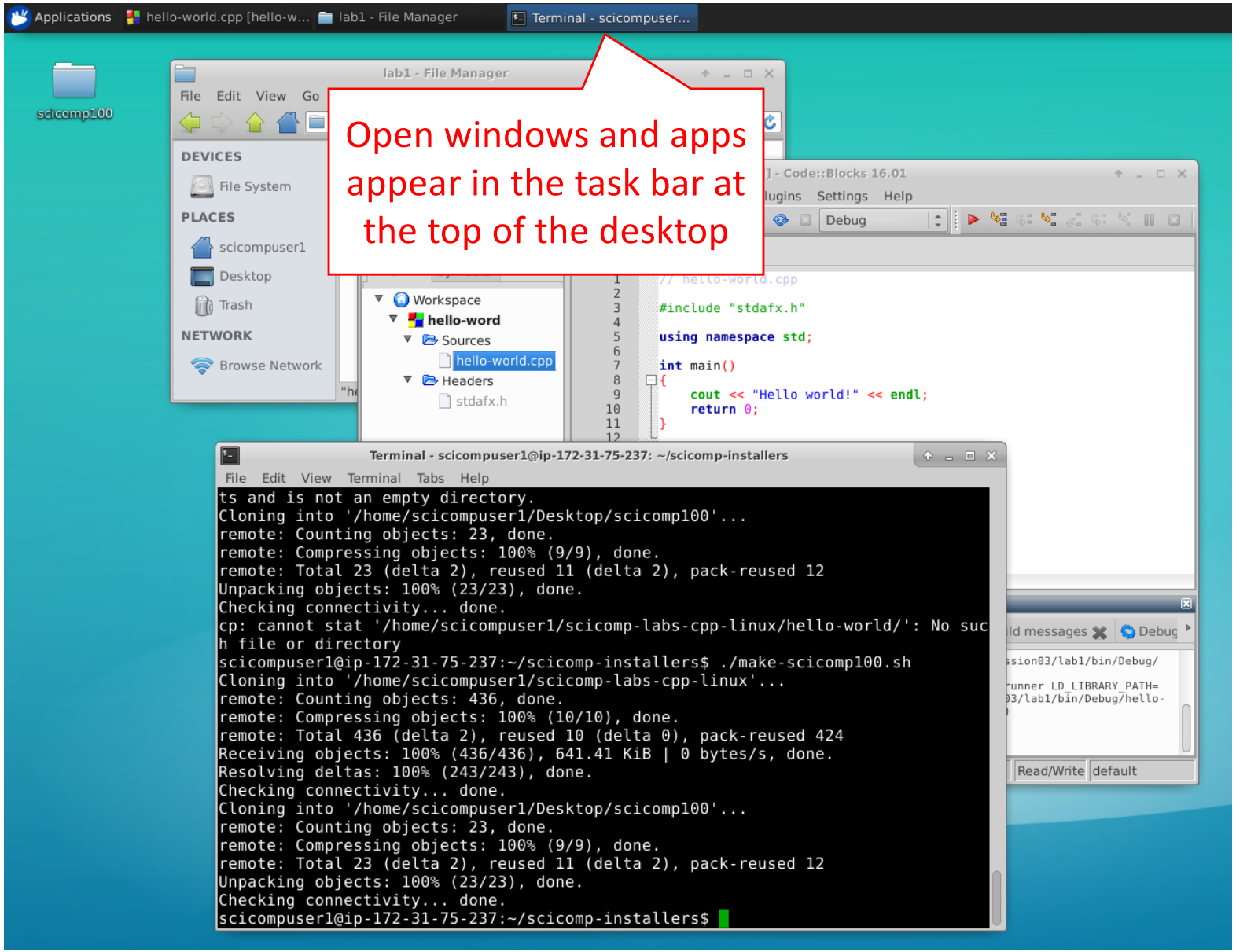
Ubuntu Linux with Xfce Desktop



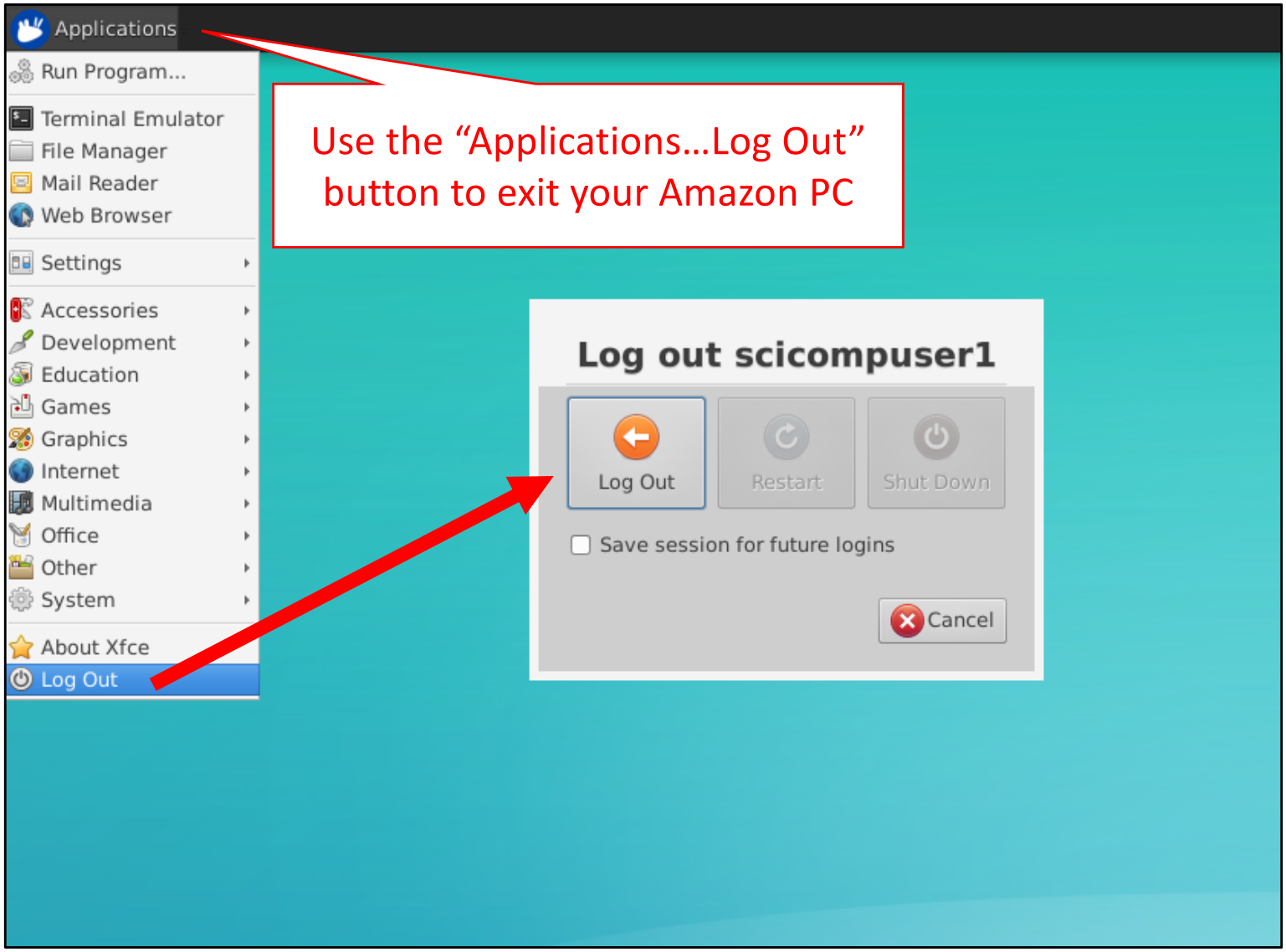
Ubuntu Linux with Xfce Desktop



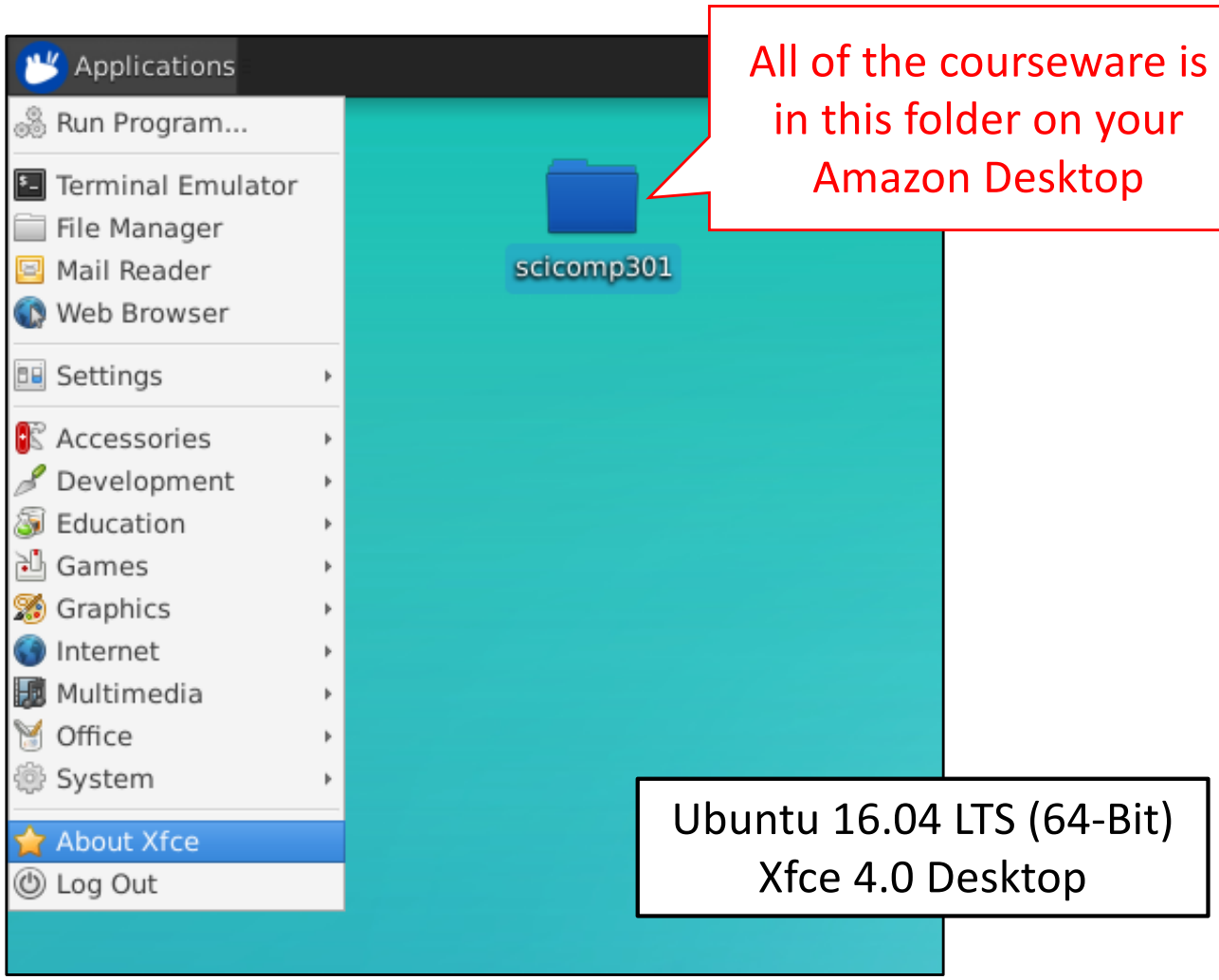
Ubuntu Linux with Xfce Desktop



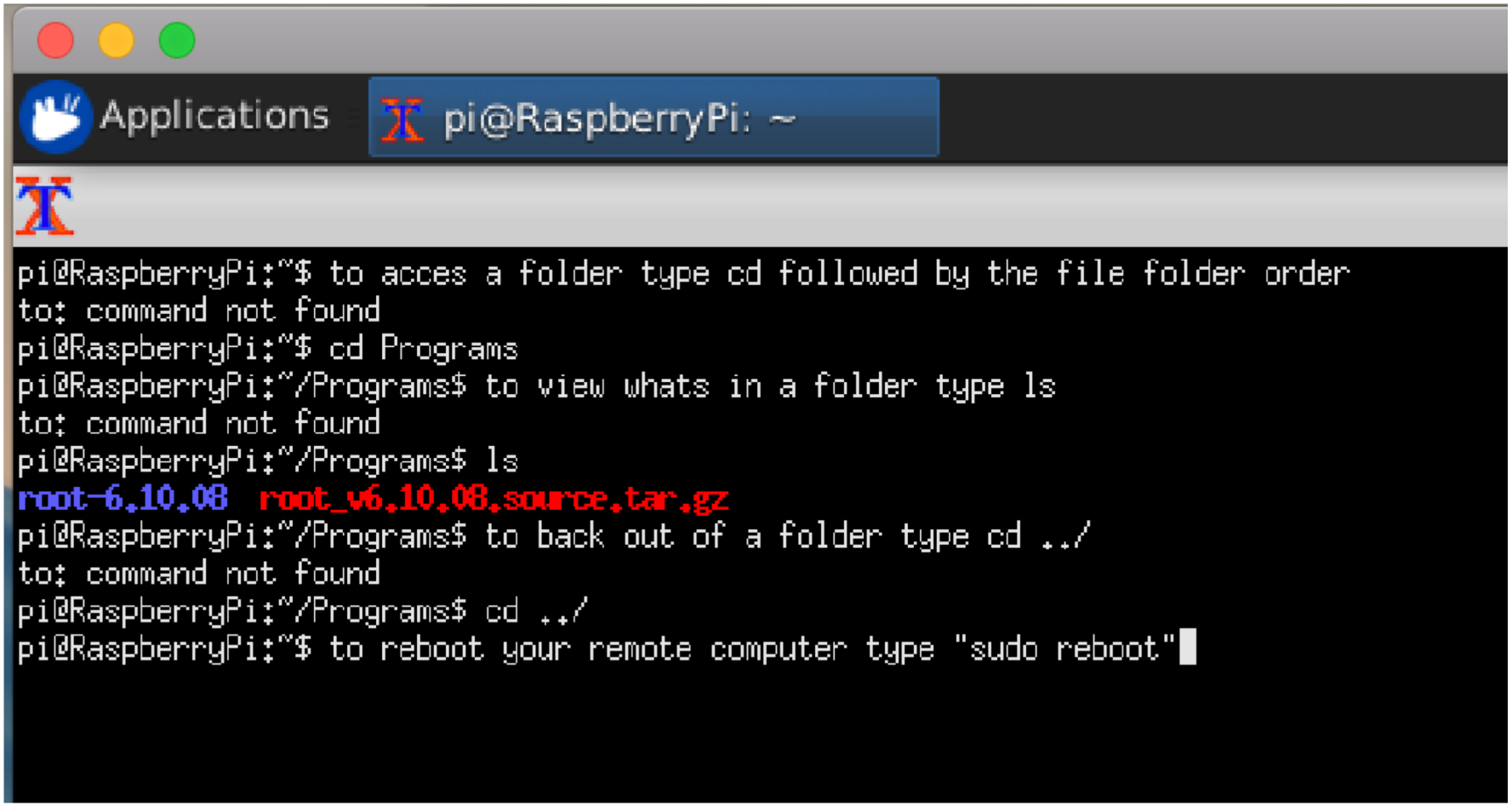
Ubuntu Linux with Xfce Desktop



SciComp Courseware Layout



Explore Terminal



Now you know…

- How to access your remote Amazon PC
- Linux with Xfce is quite similar to Microsoft Windows
- How to log out of your Linux (Ubuntu) desktop session