

Week 1

Welcome to CSCI E-52/CS50!

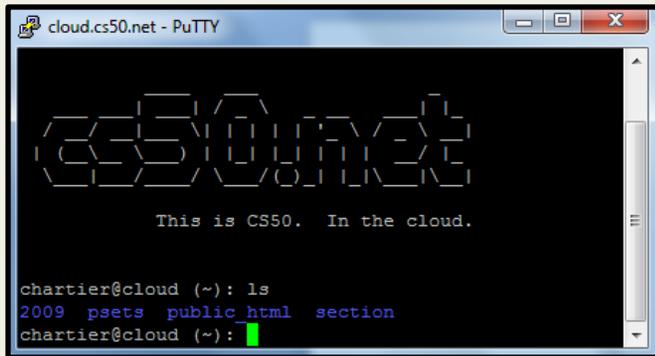
This Week

- SSH
- Unix Command Line
- Nano Text Editor
- Getting Started With C

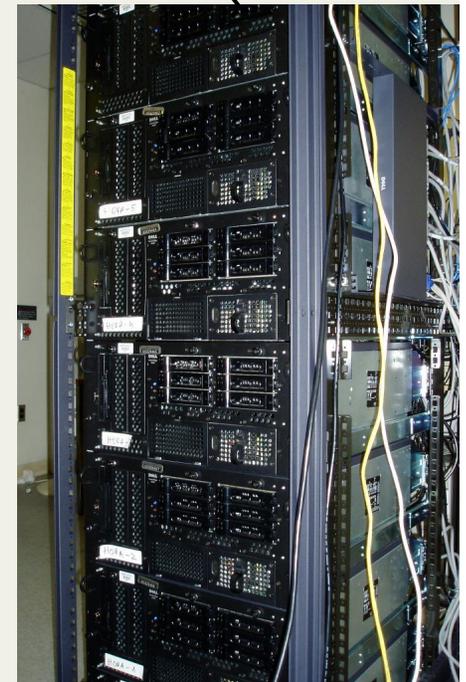
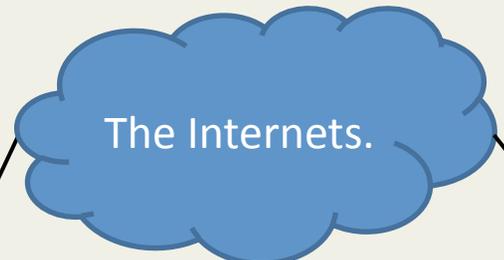
SSH

- Secure Shell
- Allows you to access another computer through command-line interface.
- We use SSH to connect to the CS50 Cloud!

SSH



```
cloud.cs50.net - PuTTY
CS50.net
This is CS50. In the cloud.
chartier@cloud (~): ls
2009 psets public html section
chartier@cloud (~):
```



SSH On Windows

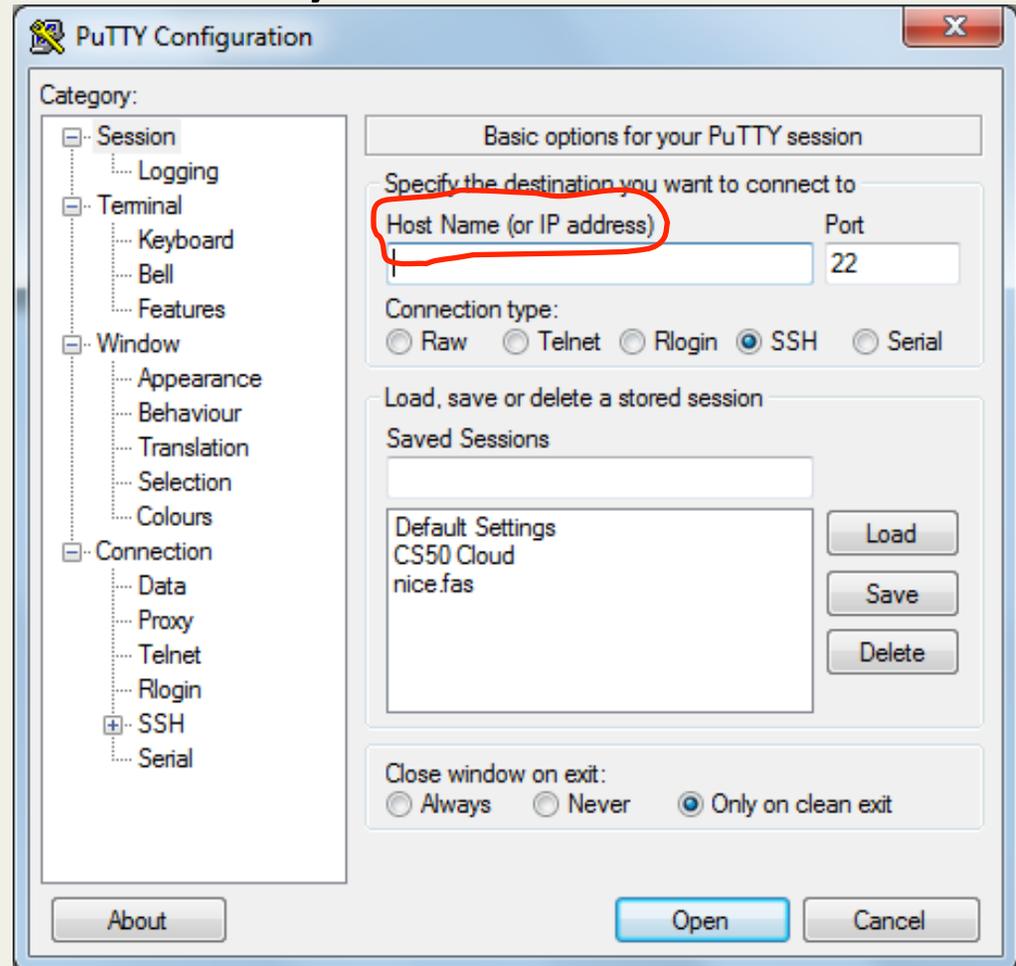
Recommended Program: Putty

Host Name

cloud.cs50.net

OR

yourUserName@cloud.cs50.net



SSH On Mac OS X

Included Program: Terminal

Just open it up and type:

```
ssh cloud.cs50.net
```

OR

```
ssh yourUserName@cloud.cs50.net
```

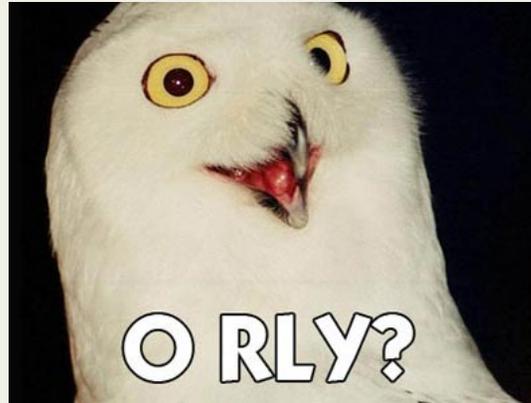
Same steps in Ubuntu Linux!



Conditions

- A condition may have two values: true or false.
- May be expressed as a logical expression or a 'bool' variable.
- Can be thought of as a yes/no question, or a logical true/false statement.

Conditions



While Loops

```
while(condition)
{
    // code block which is repeated until
    // the condition is NOT true
}
```

For Loops

```
for(initialization; condition; update)
{
    // code block
}
```

For Loops

```
for(int i = 0; i < 10; i++)  
{  
    // code block which is repeated 10 times  
}
```

while/for Comparison

```
int i = 0;
while(i < 10)
{
    printf("%d", i);
    i++;
}
```

```
for(int i = 0; i < 10; i++)
{
    printf("%d", i);
}
```

These two loops are equivalent.

Do-While Loops

```
do  
{  
    // code block  
} while (condition);
```

Unlike in a while loop, we first check the condition *after* executing the code block!