

Learning Activities: CIS 221: Linux/UNIX Programming and Scripting I

In this course, students learn to use UNIX more efficiently with advanced forms of the commands and utilities building on the fundamentals of Linux/UNIX, as well as new commands and constructs. Advanced topics include sed, grep, awk, perl, and how to effectively use regular expressions, as well as constructs and special commands used in writing shell scripts. New topics covered include functions, traps, arithmetic on variables and input/output techniques.

These learning activities were created using Articulate Storyline software. To preview or edit these files, download the zip package at the link listed below, open the folder and extract the files.

Module 1: Review Basics & Introduction to Linux Scripting

Module 2: Regular Expressions and Additional Commands

LinuxGrepCommand

<https://www.skillscommons.org/handle/taaccct/6965>

FilterCommands

<https://www.skillscommons.org/handle/taaccct/6964>

RegularExpressions

<https://www.skillscommons.org/handle/taaccct/6963>

Module 3: Meta Characters, Special Parameters, Quotes & Passing Arguments

Quote Combination Activity

<https://www.skillscommons.org/handle/taaccct/6961>

Module 4: Conditional Statements

linux_IfStatement output

<https://www.skillscommons.org/handle/taaccct/6960>

Module 5: Looping

for Loop Activity

<https://www.skillscommons.org/handle/taaccct/6959>

while Loop Activity

<https://www.skillscommons.org/handle/taaccct/6958>

more Loops Activity

<https://www.skillscommons.org/handle/taaccct/6957>

Module 6: Reading Data

ReadDataFromFileActivity

<https://www.skillscommons.org/handle/taaccct/6956>

ReadCommandActivity

<https://www.skillscommons.org/handle/taaccct/6955>

Module 7: Controlling Your Environment and Fun with Parameters

ParameterVariable Substitution output

<https://www.skillscommons.org/handle/taaccct/6954>

Module 8: Controlling, Scheduling & Functions

Module 9: Awk

Awk Print Activity

<https://www.skillscommons.org/handle/taaccct/6953>

BEGIN and END

<https://www.skillscommons.org/handle/taaccct/6952>

Awk and Reg Ex

<https://www.skillscommons.org/handle/taaccct/6951>

Awk Arrays

<https://www.skillscommons.org/handle/taaccct/6983>

Module 10: Perl

PerlOperatorsActivity

<https://www.skillscommons.org/handle/taaccct/6950>

PerlArraysActivity

<https://www.skillscommons.org/handle/taaccct/6949>

PerlPushPopShiftCommands

<https://www.skillscommons.org/handle/taaccct/6948>

Perl If Examples

<https://www.skillscommons.org/handle/taaccct/6947>