

1. Introduction

- a. What is Unix shell
- b. Which shell
- c. What is a shell script

2. First shell script

- a. Basic script
- b. User input to a script
- c. Special characters

3. Running a shell script

- a. Running a script on command line
- b. Running a script within vi editor
- c. Path and bin
- d. Script interpreters

4. Shell programming features

- a. Shell variables
- b. Environment variables
- c. The trouble with quotes
- d. Grouping commands
- e. Line control

5. Conditional code

- a. True and False

- b. Conditional command execution
- c. If else and elfi.
- d. Using test
- e. The case statement

6. Loops

- a. The while loop
- b. Break and continue
- c. Numerical calculations
- d. The for loop

7. Text processing

- a. Filters
- b. Grep
- c. Regular expressions
- d. Sed
- e. Awk

8. Functions

- a. Program structure
- b. Defining and calling a function
- c. Function parameters
- d. Function return values
- e. Functions in other files
- f. Yes/no function

9. Command line parameters

- a. Using command line parameters
- b. Using shift
- c. Using set
- d. Using IFS
- e. Usage messages

10. Advanced scripting

- a. Debugging
- b. Default values for variables
- c. Temporary files
- d. Preventing abnormal Termination

Real life shell scripting examples