



**Faculty of Engineering and Applied Science**

**SOFE 3200U Systems Programming**

## Background

Being a Linux user, the command line is always considered one of the tools that you interact with on a daily basis. Like it or not, it is much more easy to navigate via this interface rather than pointing and clicking. The more you practice, the more you will feel comfortable and see its potential. Command-line is a program called shell. Most Linux distributors today use Bash, and it is what you are really entering commands into.

Shell scripting is the easy and powerful programming method that can help users in saving time, learn command-line better, and banish tedious file management tasks.

## Objectives

The objectives of this experiment are to understand how to generate calendar shell script.

## Lab Tasks

### Task 0

Write a shell script to take 2 arguments to print "Hello World".

### Task 1

Write a shell script called cal2.sh to do the following.

1. Print the current calendar in month and year when there is no argument
2. Print the calendar with specified month matching the argument when there is one argument

```
$ ./cal3.sh 1
      January 2016
Su Mo Tu We Th Fr Sa
          1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```

3. Print the calendar month and year when providing 2 arguments

```
$ ./cal2.sh 5 2001
      May 2001
Su Mo Tu We Th Fr Sa
          1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31
```

## Task 2

Write a shell script program call cal3.sh to do the following.

1. Print the output “you must provide at least one month” when there is no argument
2. Print the calendar with specified month matching the argument when there is one argument

```
$ ./cal3.sh 1
      January 2016
Su Mo Tu We Th Fr Sa
      1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```

3. Print the calendar with only one month specified and a message stating the 2<sup>nd</sup> argument is not a valid month/input when there are 2 arguments

```
$ ./cal3.sh 5 2016
      May 2016
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

2016 is Not a valid month/input
```

## Deliverable

Answer all the questions in the lab report template provided, fill in the title page correctly and submit along with your commented code for task 1 and 2.