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Subject Name: : Linux Administration Lab **Subject Code:** 24CAP-607

Project Report: Calendar Display Script Using Bash

Objective

The objective of this project is to create a Bash script that displays a calendar for a specified month and year, or for the current month if no input is provided. This script offers users a quick way to view calendar data without having to manually enter calendar commands or navigate to other applications.Scope

This script allows users to:

- Display the calendar of any specified month and year.
- View the calendar for the current month if no input is provided.
- Execute the script on any Unix-based system that supports the `cal` command, making it a simple and versatile tool.

Technology Stack

Operating System

Linux (compatible with other Unix-based systems, such as macOS)

Programming Language

Bash Scripting

Tools and Utilities

Bash shell for script execution

cal command for calendar display functionality

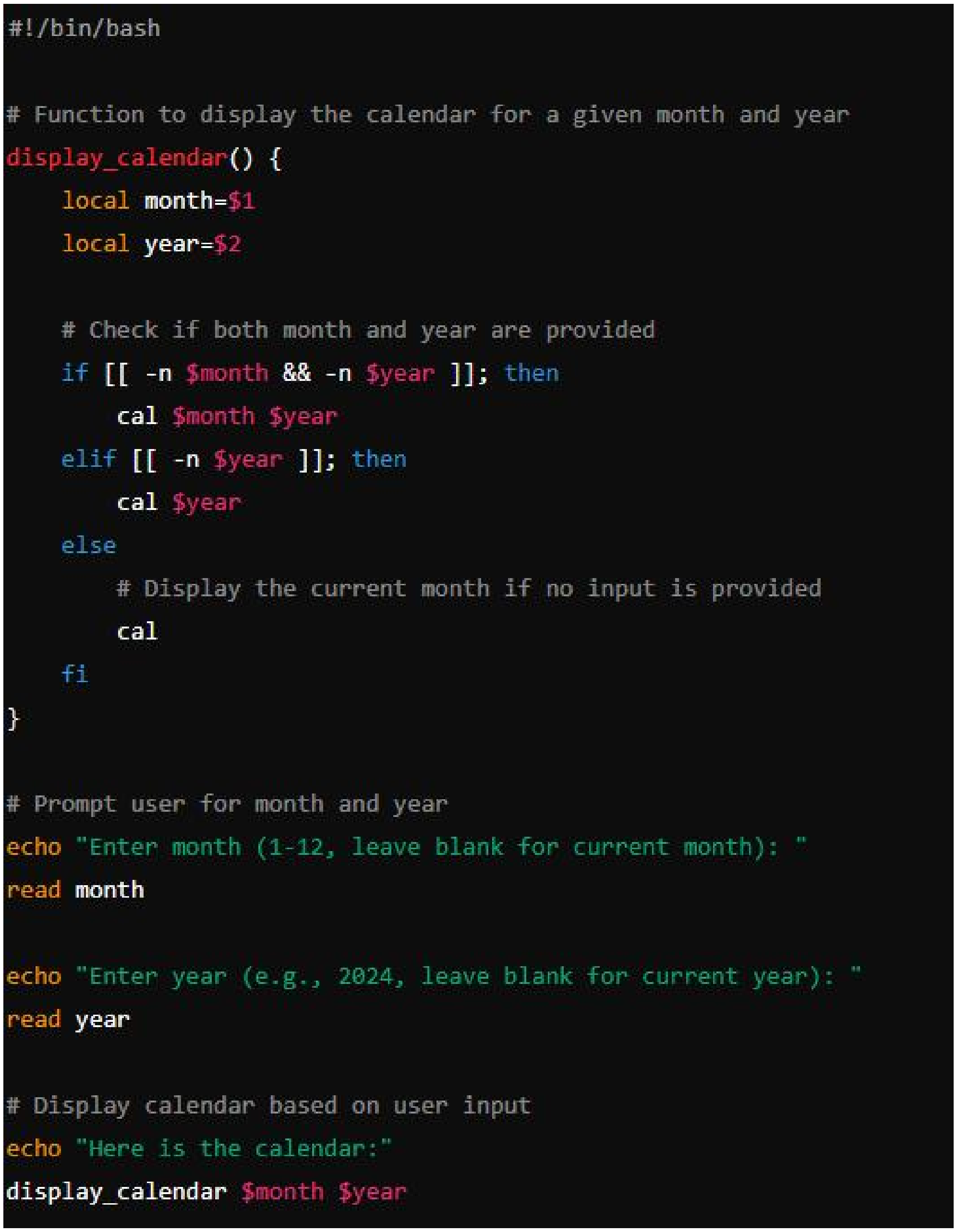
Implementation

Script Overview

This script, written in Bash, allows users to input a month and year. Based on the input, it displays the calendar for the specified month and year using the cal command. If the user provides no input, the script defaults to displaying the calendar for the current month.

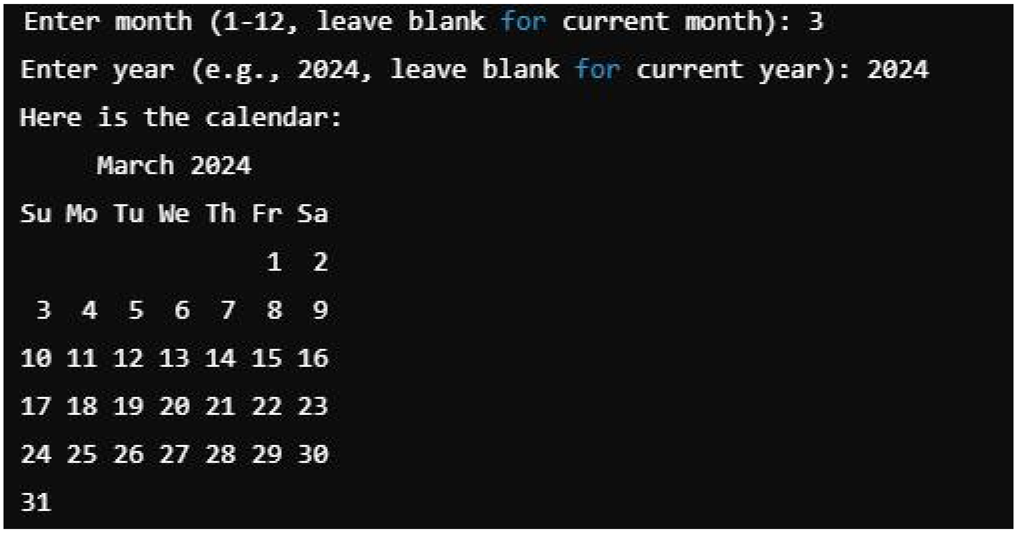
Code Explanation

Full Script



```bash
#!/bin/bash

# Function to display the calendar for a given month and year
display_calendar() {
    local month=$1
    local year=$2

    # Check if both month and year are provided
    if [[ -n $month && -n $year ]]; then
        cal $month $year
    elif [[ -n $year ]]; then
        cal $year
    else
        # Display the current month if no input is provided
        cal
    fi
}

# Prompt user for month and year
echo "Enter month (1-12, leave blank for current month): "
read month

echo "Enter year (e.g., 2024, leave blank for current year): "
read year

# Display calendar based on user input
echo "Here is the calendar:"
display_calendar $month $year
```

Result/Output/Writing Summary:



```
Enter month (1-12, leave blank for current month): 3
Enter year (e.g., 2024, leave blank for current year): 2024
Here is the calendar:
     March 2024
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
```

Features and Advantages

4. 1 Features

- **Month and Year Selection**: Users can specify any month and year to view the corresponding calendar.
- **Current Month Display**: If no input is provided, the script displays the current month's calendar.
- **User-Friendly Prompting**: Simple prompts guide the user in providing inputs, making the script easy to use.

4. 2 Advantages

- **Flexibility**: Allows users to view calendars from any month or year, making it useful for planning and scheduling.
- **Portability**: As a Bash script, it can be run on any Unix-based system with the `cal` command available.
- **Minimal Resources**: The script is lightweight and requires minimal system resources, running quickly and efficiently in the terminal.

Learning Outcomes

Enhanced Bash Scripting Skills

Enhanced Problem-Solving and Logic Development