**4.Manipulate Date/Time/Calendar**

#!/bin/bash

# Script to manipulate date, time, and calendar

# Get the current date and time

echo "Current date and time:"

current\_date=$(date +"%Y-%m-%d")

current\_time=$(date +"%H:%M:%S")

echo "Date: $current\_date"

echo "Time: $current\_time"

echo ""

# Format date in a different way

echo "Formatted date:"

formatted\_date=$(date +"%A, %B %d, %Y")

echo "Today is: $formatted\_date"

echo ""

# Get the date 7 days from now

echo "Date 7 days from now:"

future\_date=$(date -d "+7 days" +"%Y-%m-%d")

echo "Future Date: $future\_date"

echo ""

# Get the date 7 days ago

echo "Date 7 days ago:"

past\_date=$(date -d "-7 days" +"%Y-%m-%d")

echo "Past Date: $past\_date"

echo ""

# Get the first day of the current month

echo "First day of the current month:"

first\_day\_month=$(date +"%Y-%m-01")

echo "First Day: $first\_day\_month"

echo ""

# Get the last day of the current month

echo "Last day of the current month:"

last\_day\_month=$(date -d "$(date +'%Y-%m-01') +1 month -1 day" +"%Y-%m-%d")

echo "Last Day: $last\_day\_month"

echo ""

# Get the current calendar

echo "Current month's calendar:"

cal

echo ""

# Get a specific month's calendar (e.g., December 2023)

echo "Calendar for December 2023:"

cal 12 2023

echo ""

# Get the day of the week for a specific date

specific\_date="2024-08-08"

day\_of\_week=$(date -d "$specific\_date" +"%A")

echo "Day of the week for $specific\_date: $day\_of\_week"

echo ""

# Countdown to a specific date (e.g., New Year)

echo "Countdown to New Year:"

new\_year=$(date -d "2025-01-01" +%s)

current\_time=$(date +%s)

seconds\_until\_new\_year=$((new\_year - current\_time))

days\_until\_new\_year=$((seconds\_until\_new\_year / 86400))

echo "Days until New Year: $days\_until\_new\_year"

echo ""

echo "Date and time manipulation script completed.":

**5. Showing various system information**

#!/bin/bash

echo "Hostname: $(hostname)"

echo "Date and Time: $(date)"

echo "System Uptime: $(uptime -p)"

echo "System Memory: $(free -m)"

echo "Hardware: $(lshw -short)"

echo "--------------------------------"

echo "CPU: $(lscpu)"

echo "--------------------------------"

echo "Storage Devices: $(lsblk)"

echo "--------------------------------"

echo "USB Devices: $(lsusb)"

echo "--------------------------------"

echo "Kernal: $(uname)"

echo "--------------------------------"

echo "Network Interfaces: $(ifconfig)"