**labwork 10**

**1. What test command should be used to test that /usr/bin is a directory or a**

**File?**

if [ -d /usr/bin ]; then

echo "/usr/bin is a directory."

else

echo "/usr/bin is not a directory."

fi

**2. Write a script that takes two strings as input compares them and depending upon the results of thecomparison prints the results.**

#!/bin/bash

echo "Enter the first string:"

read str1

echo "Enter the second string:"

read str2

if [ "$str1" = "$str2" ]; then

echo "Strings are equal."

else

echo "Strings are not equal."

fi

**3. Write a script that takes a number (parameter) from 1-3 as input and uses case to display the nameof corresponding month.**

#!/bin/bash

echo "Enter a number (1-3):"

read num

case $num in

1) echo "January" ;;

2) echo "February" ;;

3) echo "March" ;;

\*) echo "Invalid month number" ;;

esac

**4. Write a script that calculates the average of all even numbers less than or equal to your roll numberand prints the result.**

#!/bin/bash

sum=0

count=0

for (( i=1; i<=35; i+=2 )); do

sum=$((sum + i))

count=$((count + 1))

done

average=$((sum / count))

echo "Average of even numbers is: $average"

**5. Write a function that displays the name of the week days starting from Sunday if the user passes aday number. If a number provided is not between 1 and 7 an error message is displayed.**

#!/bin/bash

display\_weekday() {

day\_number=$1

case $day\_number in

1) echo "Sunday" ;;

2) echo "Monday" ;;

3) echo "Tuesday" ;;

4) echo "Wednesday" ;;

5) echo "Thursday" ;;

6) echo "Friday" ;;

7) echo "Saturday" ;;

\*) echo "Error: Invalid day number. Please enter a number between 1 and 7." ;;

esac

}

echo "Enter a day number (1-7):"

read user\_day

display\_weekday $user\_day

**6. Write scripts that displays the parameters passed along with the parameter number using while anduntil statements.**

#!/bin/bash

Using while loop:

i=1

while [ $i -le $# ]; do

echo "Parameter $i: ${!i}"

i=$((i + 1))

done

Using until loop:

j=1

until [ $j -gt $# ]; do

echo "Parameter $j: ${!j}"

j=$((j + 1))

done

**7. Write a script that displays the following menu:**

** Quotient**

** Remainder**

#!/bin/bash

while true; do

echo "Menu:"

echo "1. Quotient"

echo "2. Remainder"

echo "3. Exit"

read choice

case $choice in

1)

echo "Enter dividend:"

read dividend

echo "Enter divisor:"

read divisor

quotient=$((dividend / divisor))

echo "Quotient: $quotient"

;;

2)

echo "Enter dividend:"

read dividend

echo "Enter divisor:"

read divisor

remainder=$((dividend % divisor))

echo "Remainder: $remainder"

;;

3)

echo "Exiting the program."

break

;;

\*)

echo "Invalid choice. "

;;

esac

done