**1.**

#!/bin/bash

# 1. Write a shell script to find out whether an integer input through the keyboard is an odd number or an even number.

echo "Enter an Integer: "

read num

if [ $((num % 2)) -eq 0 ]

then

echo "$num is an Even Number."

else

echo "$num is an Odd Number."

fi

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OUTPUT -

$ bash q1.sh

Enter an Integer:

4

4 is an Even Number.

$ bash q1.sh

Enter an Integer:

7

7 is an Odd Number.

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**2.**

#!/bin/bash

# 2. Write a shell script to find out whether any year input through the keyboard is a leap year or not. If no argument is supplied the current year should be assumed.

if [ -z "$1" ]

then

year=$(date +%Y)

else

year=$1

fi

if [ $((year % 400)) -eq 0 ]

then

echo "$year is a leap year."

elif [ $((year %100)) -eq 0 ]

then

echo "$year is not a leap year"

elif [ $((year %4)) -eq 0 ]

then

echo "$year is a leap year"

else

echo "$year is not a leap year"

fi

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OUTPUT -

$ bash q2.sh 2019

2019 is not a leap year

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**3.**

#!/bin/bash

# 3. Write a shell script to find the maximum of three numbers provided as command line arguments.

if [ $1 -ge $2 ] && [ $1 -ge $3 ]

then

echo "$1 is the maximum of the 3 numbers."

elif [ $2 -ge $1 ] && [ $2 -ge $3 ]

then

echo "$2 is the maximum of the 3 numbers."

else

echo "$3 is the maximum of the 3 numbers."

fi

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OUTPUT -

$ bash q3.sh 100 3 700

700 is the maximum of the 3 numbers.

$ bash q3.sh 3 4 7

7 is the maximum of the 3 numbers.

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**4.**

#!/bin/bash

# 4. Write a shell script to check whether a given number is prime or not.

num=$1

is\_prime=true

if [ $num -eq 0 ] || [ $num -eq 1 ]

then

is\_prime=false

fi

for (( i=2; i-le$((num/2)); i++ ))

do

if [ $((num % i)) -eq 0 ]

then

is\_prime=false

break

fi

done

if $is\_prime

then

echo "$num is a Prime Number."

else

echo "$num is not a Prime Number."

fi

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OUTPUT -

$ bash q4.sh 30

30 is not a Prime Number.

$ bash q4.sh 29

29 is not a Prime Number.

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**5.**

#!/bin/bash

# 5. Write a shell script that displays a list of all files in the current directory to which you have read, write and execute permissions.

echo "List of files in the current directory with read, write and execute permissions:"

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

for file in \*

do

if [ -r "$file" ] && [ -w "$file" ] && [ -x "$file" ]

then

echo "$file"

fi

done

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OUTPUT -

$ bash q5.sh

List of files in the current directory with read, write and execute permissions:

-----------------------------------------------------------------------------

a.txt

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