1. Write a shell script to Print prime numbers from 1 to **n**​. Read the value of **n** from user.

2. Write a script to check given number is even or odd.

#!/bin/bash

echo -n "Enter the number: "

read num

if [ `expr $num % 2` -eq 0 ]

then

echo " $num is even number "

else

echo " $num is odd number"

fi

3. Write a shell script to convert a decimal number to binary number.

#!/bin/bash

echo -n "Enter the number:"

read a

bin=""

while [ $a -gt 0 ]

do

rem=`expr $a % 2`

bin=$rem$bin

a=`expr $a / 2`

done

echo "$bin"

4. Write a script to **swap**​ 2 numbers using intermediate variable.

#!/bin/bash

echo -n "Enter the first number:"

read a

echo -n "Enter the second number:"

read b

c=$a

a=$b

b=$c

echo "after swapping a=$a b=$b "

5. Write a script to **swap**​ 2 numbers without using intermediate variable.

#!/bin/bash

echo -n "Enter the first num:"

read x

echo -n "Enter the second num:"

read y

x=$(($x+$y))

y=$(($x-$y))

x=$(($x-$y))

echo "After swapping x=$x y=$y"

6. Write a script to reverse a number using while loop.

#!/bin/bash

echo -n "Enter the number:"

read num

rev=0

while [ $num -gt 0 ]

do

n=$(( $num % 10 ))

rev=$((( $rev \* 10 ) + $n ))

num=$(( $num / 10 ))

done

echo "Reverse: $rev"

7. print multiplication table of integer using while loop.

#!/bin/bash

echo "Multiplication table"

echo -n "Enter the number:"

read num

n=1

while [ $n -le 10 ]

do

echo "$num x $n = $((num\*n))"

n=$((n+1))

done

8. Get year as an input from user and find whether year is leap year or not.

#!/bin/bash

echo -n "Enter a year: "

read year

if [ `expr $year % 400` -eq 0 ]

then

echo "$year is a Leap Year"

elif [ `expr $year % 4` -eq 0 ]

then

echo "$year is a Leap Year"

else

echo "$year is not a leap year"

fi

9. Write a script to read the number of rows to be displayed in the pattern and print following pattern using for loop: