**Q1. To check Prime Number**

#!/bin/bash

echo -n "Enter a number"

read n

for (( a=1; a<=n; a++ ))

do

c=0

for (( b=2; b<a; b++ ))

do

if [ `expr $a % $b` -eq 0 ]

then

c=1

fi

done

if [ $c -eq 0 ]

then

echo $a

fi

done

**Q2. Even or Odd**

#!/bin/bash

echo -n "Enter a number:"

read n

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

then

echo "$n is Even"

else

echo "$n is Odd"

fi

**Q3. Decimal to Binary**

echo enter n

read n

c=$(echo "obase=2;$n" | bc)

echo binary $c

**Q4. Swap using third variable**

#/bin/bash

echo "Before Swapping"

echo -n "Enter First number"

read a

echo -n "Enter Second number:"

read b

temp=$a

a=$b

b=$temp

echo "After Swapping"

echo "First number is: "$a

echo "Second number is: "$b

**Q5. Swap without using third variable**

#/bin/bash

echo "Before Swapping"

echo -n "Enter First number"

read a

echo -n "Enter Second number:"

read b

a=$(( $a + $b ))

b=$(( $a - $b ))

a=$(( $a - $b ))

echo "After Swapping"

echo "First number is: "$a

echo "Second number is: "$b

**Q.6. To reverse a number**

#/bin/bash

echo "Enter a number"

read n

rev=0

while [ $n -ne 0 ]

do

rev=$(( `expr $rev \\* 10` + `expr $n % 10` ))

n=$(( `expr $n / 10` ))

done

echo $rev

**Q 7. Multiplication Table**

#/bin/bash

echo "Enter a Number"

read n

a=0

while [ $a -le 10 ]

do

echo " $n "x" $a "=" `expr $n \\* $a`"

a=$((`expr $a + 1`))

done

**Q.8. Leap year or not**

#/bin/bash

echo -n "Enter a number:"

read n

if [ `expr $n % 4` -eq 0 ] && [ `expr $n % 100` -ne 0 ] || [ `expr $n % 400` -eq 0 ]

then

echo "$n is a leap year"

else

echo "$n is not a leap year"

fi

**Q.9 Number Pattern**

#/bin/bash

echo -n "Enter number of rows"

read n

count=1

for (( i=1; i<=n; i++ ))

do

for (( j=1; j<=i; j++ ))

do

echo -n "$count "

count=$(($count+1))

done

echo ""

done