**Write a Shell program to check the given number is even or odd**

echo "Enter the Number"

read n

r=`expr $n % 2`

if [ $r -eq 0 ]

then

echo "$n is Even number"

else

echo "$n is Odd number"

fi

**CORRECT PROGRAM:**

echo -n "Enter a number:"

read n

echo -n "RESULT: "

if [ `expr $n % 2` == 0 ]

then

echo "$n is even"

else

echo "$n is Odd"

fi

**Write a Shell program to check the given year is leap year or not**

echo "Enter the year"

read y

b=`expr $y % 4`

if [ $b -eq 0 ]

then

echo "$y is a leap year"

else

echo "$y is not a leap year"

fi

**CORRECT PROGRAM:**

echo -n "Enter a year:"

read year\_checker

if [ `expr $year\_checker % 4` -eq 0 ]

then

echo "$year\_checker is a leap year"

else

echo "$year\_checker is not a leap year"

fi

**Write a Shell program to find the factorial of a number**

echo "Enter a Number"

read n

i=`expr $n - 1`

p=1

while [ $i -ge 1 ]

do

n=`expr $n \\* $i`

i=`expr $i - 1`

done

echo "The Factorial of the given Number is $n"

**CORRECT PROGRAM:**

echo "Enter a number"

read num

fact=1

while [ $num -gt 1 ]

do

fact=$((fact \* num))

num=$((num - 1))

done

echo $fact

**Write a Shell program to swap the two integers**

echo "Enter Two Numbers"

read a b

temp=$a

a=$b

b=$temp

echo "after swapping"

echo $a $b

**CORRECT PROGRAM:**

echo "enter the first number"

read first

echo "enter the second number"

read second

temp=$first

first=$second

second=$temp

echo "After swapping, numbers are:"

echo "first = $first, second = $second"