Exp-2a):

AIM: To write a Shellscript to to display basic calculator.

PROGRAM:

```
echo "Enter two numbers:"
read a
read b

echo "add $((a + b))"
echo "sub $((a - b))"
echo "mul $((a * b))"

# Avoid division by zero
if [ $b -ne 0 ]; then
  echo "div $((a / b))"
  echo "mod $((a % b))"
else
  echo "div Error (division by zero)"
  echo "mod Error (division by zero)"
fi
```

OUTPUT:

```
hv@HV:~$ vi arith.sh
hv@HV:~$ sh arith.sh
Enter two numbers:
2
4
add 6
sub -2
mul 8
div 0
mod 2
```

Exp-2b):

AIM: To write a Shellscript to test given year is leap or not using conditional statement.

PROGRAM:

```
echo "Enter year:"
read year

if [ $((year % 4)) -eq 0 ]; then
    if [ $((year % 100)) -ne 0 ] || [ $((year % 400)) -eq 0 ]; then
        echo "leap year"
    else
        echo "not a leap year"
    fi
else
    echo "not a leap year"
fi
```

OUTPUT:

```
hv@HV:~$ vi leap.sh
hv@HV:~$ sh leap.sh
Enter year:
2004
leap year
```