

PROGRAM TITLE:Calculate a^b .**THEORY:**

We take the inputs using command line arguments. We calculate the power with the help of a function.

PROGRAM CODE:

```
#Shell Program to calculate a to the power b
a=$1
b=$2
echo "We are going to calculate" $a " to the power " $b
pow()
{
    x=1 #we can access and edit a and b here
    while [ $b -gt 0 ]
    do
        x=`expr $x \* $a`
        b=`expr $b - 1`
    done
    #nothing is being returned
}
pow
echo "The answer is::" $x #x can also be accessed (and edited) here
```

OUTPUT:**Set 1:**

Input:sh ass3.sh 2 3

We are going to calculate 2 to the power 3

The answer is:: 8

Set 2:

Input:sh ass3.sh 4 8

We are going to calculate 4 to the power 8

The answer is:: 65536

DISCUSSION:

1. The same variables are being used everywhere within the program.