

1) Shell script to find the factorial of a number

```
#!/bin/sh
```

```
echo "Enter the number"
```

```
read num
```

```
fact=1
```

```
while [ $num -gt 1 ]
```

```
do
```

```
fact=`expr $fact \* $num`
```

```
num=`expr $num -1`
```

```
done
```

```
echo $fact
```

Output:

Enter the number:

3

6

2) Shell script to perform arithmetic operations on given two numbers

```
#!/bin/sh
```

```
echo "Menu"
```

```
echo "1. Addition\n2. Subtraction\n3. Multiplication\n4. Division"
```

```
read opt
```

```
echo "Enter two number"
```

```
read a
```

```
read b
```

```
case "$opt" in
```

```
1) sum=$((a+b))
```

```
echo "The sum of $a and $b is $sum";;
```

```
2) diff=$((a-b))
```

```
echo "The diff. of $a and $b is $diff";;
```

```
3) mul=$((a*b))
```

```
echo "The product of $a and $b is $mul";;
```

```
4) div=$((a/b))
```

```
echo "The quotient of $a and $b is $div";;
```

```
*) echo "Invalid option";;
```

```
esac
```

Output: Menu:

1. Addition

2. Subtraction

3. Multiplication

4. Division

3

Enter two numbers

2

3

The product of 2 and 3 is 6

3. Shell script to find sum of even numbers upto, n

```
#!/bin/sh
```

```
echo "Enter the value of n:\n"
```

```
read n
```

```
sum=0
```

```
while [ $n -gt 0 ]
```

```
do
```

```
if test $((($n%2)) -eq 0
```

```
then
```

```
sum=$((sum + $n))
```

```
n=$((n - 1))
```

```
else
```

```
n=$((n - 1))
```

```
fi
```

```
done
```

```
echo "The sum is: $sum"
```

Output:

Enter the value of n:

7

The sum is: 12

4. Shell script to find the power of a number:

```
#!/bin/sh
```

```
echo "Enter the base and the power:\n"
```

```
read b
```

```
read e
```

```
mul=1
```

```
while [ $e -gt 0 ]
```

```
do
```

```
mul=$((b * mul))
```

```
e=$((e - 1))
```

```
done
```

```
echo $mul
```

Output:

Enter the base and the power:

2

3

Power = 8

5) Shell script to do the following read the user input from the user (yes or no) option. Assume the possible way in which user may enter the input.

```
#!/bin/bash
```

```
echo "Enter option"
```

```
read opt
```

```
case "$opt" in
```

```
"y"|"Y"|"yes"|"YES"|"yes") echo "Agreed";;
```

```
"N"|"n"|"No"|"NO"|"no") exit 1;;
```

```
*) echo "Invalid option";;
```

```
esac
```

Output:

Enter option

Yes

Agreed

Enter option

No

Exited

If they give any cases of yes print "Agreed".
If they give any cases of no then exit with 1.

Lee
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