

----Lecture 08

....

```
-- ` is something different does not
echo `hello world I am here`
```

```
-- Integer arithmetic via expr
icy=53
others=23
echo `expr $icy + $others `
echo `expr $icy - $others `
echo `expr $icy \* $others `

echo `expr $icy / $others `
echo `expr $icy % $others `
```

--Excercise 6.3:

Modify the program to read the icy and others from the command line and print the values properly

-- Exercise 6.4

Write a program to ask for date of birth of people and calculate how many days they lived.
Year=365 days Months are 30 days and todays date is hardcoded.

---- start of lecture 8

– Shell awareness

Change the spaces and see what happens. Be careful with spaces.
Paranthesis are with \ (\)

```
----- you can also do $((
icy=23
others=24
echo $((icy + others))
echo $((icy+others))
echo $((icy*others))
```

-- Exercise 8.1 : write the above arithmetic with \$((

```
----- $(( )) is like let
no1=3
no2=7
result=$((no1+no2))
--what will i get if
echo result
-- what about?
echo $result
so $() is like let
```

you can use let

```

2016 let result1=no1+no2
2017 echo $result
- you can do more increment
2024 let result1+=7
2025 echo $result1

```

```

---For floating point arithmetic
you need to use other methods bc, we will see that later
priceofapple=1.2
priceoforange=2.5
c=`echo $priceofapple + $priceoforange |bc`
echo $c

```

```

---- let us make some files and learn about parameters
- How to pass parameters
- see
l08_01_input_oneparameters.sh
l08_02_input_twoparameters.sh

```

-what does l08-03... does?

Exercise 8.2: modify that so that when you make an sh file it add shebang at the top.

```

-- tables
Speaking of the price I like to make s shopping list
$ echo -e "no \t item \t price \n 1 \t orange \t 1.1 \n 2 \t apple \t 1.50 \n 3 \t banana \t 2.1 "

```

no	item	price
1	orange	1.1
2	apple	1.50
3	banana	2.1

Not really good spaces are not OK let us print it properly

```

-- use printf
left alignment of text
f for floating point
printf "my weakly shopping list:\n"
printf "%-5s %-15s %-6s\n" no item price
printf "%-5s %-15s %-3.2f\n" 1 apple 1.31
printf "%-5s %-15s %-3.2f\n" 2 orange 1.61
printf "%-5s %-15s %-3.2f\n" 3 banana 2.35
printf "%-5s %-15s %-3.2f\n" 4 sthstrange 43.5446

```

-- Exercise 8.3: print your next week diary

```

--- gently into for loop
- what does this do ?
for file in *; do echo ${file}; done

```

```
-- create a directory with two files
cd test
touch a
touch b
ls
- what does this do
for file in *; do `mv ${file} ${file}.txt`; done
ls
```

Exercise 8.4: Write a small script that reads all the files in a directory and copy them to a file called MyFiles in a directory one level above. (Hint: one level above is .. and remember >>)