

week 5:

Shell Script Programs

1. Write a shell script to print the combinations of numbers 1 2 3.

→ name comb.sh

OUTPUT:

!/bin /bash

echo " combinations for 1 2 3 :"

for i in 1 2 3
dofor j in 1 2 3
dofor k in 1 2 3
do

echo \$i \$j \$k

done

done

done

```

111 121 221 311 331
112 132 212 312 332
113 133 213 313 333
121 211 231 321
122 212 232 322
123 213 233 323

```

2. Write a shell script to find the Fibonacci series upto n.

→ name fib.sh

!/bin /bash

echo "enter the number"

read n

a=0

b=1

count = 2

echo " Fibonacci series "

echo \$a

echo \$b

while [\$count -le \$n]

do

file
6/11/22

```
fib = 'expr $a + $b'
```

```
a = $b
```

```
b = $fib
```

```
echo $fib
```

```
count=$((count+1))
```

```
done
```

OUTPUT: Enter the number 10 0 1 1 2 3 5 8 13

3. Write a shell script to find GCD and LCM.

→ name gcd/lcm.sh

→ #!/bin/bash

```
read m n
```

```
echo "To find GCD and LCM"
```

```
echo "Enter two numbers are"
```

```
echo "m = $m and n = $n"
```

```
temp = 'expr $m / $n'
```

```
while [ $m != $n ]
```

```
do
```

```
if [ $m -gt $n ]
```

```
then
```

```
m = 'expr $m - $n'
```

```
else
```

```
n = 'expr $n - $m'
```

```
fi
```

```
done
```

```
echo GCD = $n
```

```
lcm = 'expr $temp / $n'
```

```
echo LCM = $lcm
```

OUTPUT:

Enter two integers

2 4

To find GCD and LCM

Given - two numbers are

$m = 2$ and $n = 4$

$GCD = 2$

$LCM = 4$.

4. Write a shell script to display pass class of a student.

→ nano pass.sh

→ # ! /bin /bash

echo " enter your marks "

read marks

if [\$marks -le 40]

then

echo " fail "

elif [\$marks -ge 40]

then

echo " pass "

elif [\$marks -ge 40] && [\$marks -le 59]

then

echo " result : second class "

elif [\$marks -ge 60] && [\$marks -le 85]

then

echo " result : first class "

elif [\$marks -ge 85]

then

echo " result : distinction "

fi

OUTPUT : Enter your marks

84

Pass .

5. Write a shell program to give multiple file names as argument & search pattern in files.

→ name multiple.sh

#!/bin/bash

for f in \$1 \$3 \$4

do
grep -l "\$1" \$f
done

OUTPUT:

sh grep.sh "bin" gcc.sh file.sh q.txt
gcc.sh
file.sh.

Done
13/12/22