Debobrata Chakraborty

ID: 18-36103-1

Github Link: https://github.com/Debobrata-Chakraborty-Kakon/OS

1. Write a shell script to generate the series of even number from 0 to n. 0 2 4.

Code:

```
for i in 0 2 4
do
echo $i
done
```

```
kakon@ubuntu:~/Assignment$ ./1.sh
0
2
4
```

2. Write a shell script to find out the sum of series 1+2+3+..., where n is input by the user.

```
clear
echo enter value of n
read n
i=1
sum=0
while [$i -le $n ]
do
sum=`expr $sum + $i`
i=`expr $i + 1`
done
echo Sum of series is $sum
```

```
enter value of n
3
Sum of series is 6
kakon@ubuntu:~/Assignment$
```

3. Write a shell script to print the characters of an input string into reverse order.

Code:

```
read input
reverse=""
len=${#input}
for (( i=$len-1; i>=0; i-- ))
do
          reverse="$reverse${input:$i:1}"
done
echo "$reverse"
```

kakon@ubuntu:~/Assignment\$./3.sh hello olleh

4. Write a shell script to count the number of characters, words, spaces in a given text.

```
clear
echo "enter text"
read t
w=`expr $t | wc -w`
c=`expr $t | wc -c`
c=`expr $c - 1`
s=`expr $w - 1`
echo characters = $c
echo words = $w
```

```
"enter text"
halo
characters = 4
words = 1
spaces = 0
kakon@ubuntu:~/Assignment$ []
```

5. The marks obtained by a student in two different subjects are input through the keyboard. The student gets a division as per the following rules. (Using elif clause). If percentage greater than or equal to 60 get First division if percentage greater than or equal to 50 or less than 60 get Second division if percentage greater than or equal to 40 or less than 50 get Third division if percentage less than 40 Fail.

```
clear
echo enter marks of two subjects
read m1
read m2
per=`echo \( $m1 + $m2\) /2| bc`
echo
echo Percentage is $per
if [ $per -ge 60 ]
then
echo First division
else
if [ $per -ge 50 -a -$per -lt 60 ]
then
echo Second division
else
```

```
if [ $per -ge 40 -a $per -lt 50 ]
then
echo Third division
else
echo Fail
fi
fi
```

```
enter marks of two subjects
50
80
Percentage is 65
First division
kakon@ubuntu:~/Assignment$
```

6. Write a shell script to search a file in current directory.

Code:

```
echo Please enter a file name
read num3
if [ -f $num3 ]
then
echo Found
else
```

echo Not Found

fi

```
kakon@ubuntu:~/Assignment$ chmod 777 6.sl
kakon@ubuntu:~/Assignment$ ./6.sh
Please enter a file name
3.sh
Found kakon@ubuntu:~/Assignment$
```

7. Run All grep command

```
cat /proc/cpuinfo | grep 'vendor' | uniq
cat /proc/cpuinfo | grep 'model name' | uniq
cat /proc/cpuinfo | grep processor | wc -l
cat /proc/cpuinfo | grep 'core id'
```

```
kakon@ubuntu:~$ cat /proc/cpuinfo | grep 'vendor' | uniq
vendor_id : GenuineIntel
kakon@ubuntu:~$ cat /proc/cpuinfo | grep 'model name' | uniq
model name : Intel(R) Core(TM) i5-6500 CPU @ 3.20GHz
kakon@ubuntu:~$ cat /proc/cpuinfo | grep processor | wc -l
1
kakon@ubuntu:~$ cat /proc/cpuinfo | grep 'core id'
core id : 0
kakon@ubuntu:~$
```