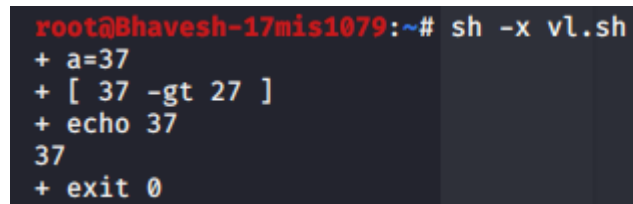# Linux Vlab

17MIS1079
k.Bhavesh

1.

Code:

```
#!/bin/sh
a=37
if [ $a -gt 27 ]
then
echo $a
fi
exit $?
```
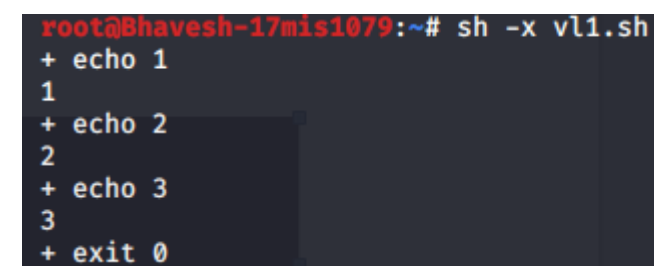
Output:


```
root@Bhavesh-17mis1079:~# sh -x vl.sh
+ a=37
+ [ 37 -gt 27 ]
+ echo 37
37
+ exit 0
```

2.

Code:

```
#!/usr/bin/env bash
for a in 1 2 3
do echo "$a"
done
exit 0
echo $?
```

Output:


```
root@Bhavesh-17mis1079:~# sh -x vl1.sh
+ echo 1
1
+ echo 2
2
+ echo 3
3
+ exit 0
```

3.

Code:

```
badname=`ls | grep ' '`
echo "$badname"
rm "$badname"
```

Output:

4.

Code:

```
#!/usr/bin/env bash
area[11]=23
area[13]=37
area[51]=UFOs
echo -n "area[11] = "
echo ${area[11]}
 echo -n "area[13] = "
echo ${area[13]}
echo -n "area[43] = "
echo ${area[43]}
```

```
echo "(area[43] unassigned)"
area[5]=`expr ${area[11]} + ${area[13]}`
echo "area[5] = area[11] + area[13]"
echo -n "area[5] = "
echo ${area[5]}
area[6]=`expr ${area[11]} + ${area[51]}`
echo "area[6] = area[11] + area[51]"
echo -n "area[6] = "
echo ${area[6]}
```

Output:

```
root@Bhavesh-17mis1079:~# cat > pp.txt
root@Bhavesh-17mis1079:~# chmod +x vl3.sh
root@Bhavesh-17mis1079:~# ./vl3.sh | tee -a pp.txt
area[11] = 23
area[13] = 37
area[43] =
(area[43] unassigned)
area[5] = area[11] + area[13]
area[5] = 60
expr: non-integer argument
area[6] = area[11] + area[51]
area[6] =
root@Bhavesh-17mis1079:~# ./vl3.sh | tee -a pp.txt
area[11] = 23
area[13] = 37
area[43] =
(area[43] unassigned)
area[5] = area[11] + area[13]
```

```
root@Bhavesh-17mis1079:~# ./vl3.sh | tee -a pp.txt
area[11] = 23
area[13] = 37
area[43] =
(area[43] unassigned)
area[5] = area[11] + area[13]
area[5] = 60
expr: non-integer argument
area[6] = area[11] + area[51]
area[6] =
root@Bhavesh-17mis1079:~# cat pp.txt
area[11] = 23
area[13] = 37
area[43] =
(area[43] unassigned)
area[5] = area[11] + area[13]
area[5] = 60
area[6] = area[11] + area[51]
area[6] =
area[11] = 23
area[13] = 37
```

5.

Script Flag Options:
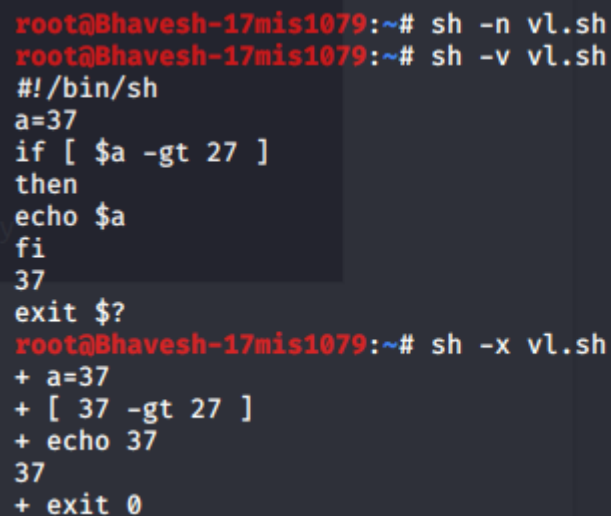
sh -n scriptname checks syntax errors

sh -v scriptname echoes each command before executing it

sh -x scriptname echoes the result each command, but in an abbreviated manner

Code 1:

```
a=37 if [ $a -gt 27 ]
then
echo $a
fi
exit $?
```
Output:

```
root@Bhavesh-17mis1079:~# sh -n vl.sh
root@Bhavesh-17mis1079:~# sh -v vl.sh
#!/bin/sh
a=37
if [ $a -gt 27 ]
then
echo $a
fi
37
exit $?
root@Bhavesh-17mis1079:~# sh -x vl.sh
+ a=37
+ [ 37 -gt 27 ]
+ echo 37
37
+ exit 0
```

Code 2:

```
#!/usr/bin/env bash
for a in 1 2 3
do echo "$a"
done
exit 0
echo $?
```

Output:

```
root@Bhavesh-17mis1079:~# sh -n vl1.sh
root@Bhavesh-17mis1079:~# sh -x vl1.sh
+ echo 1
1
+ echo 2
2
+ echo 3
3
+ exit 0
root@Bhavesh-17mis1079:~# sh -v vl1.sh
#!/usr/bin/env bash
for a in 1 2 3
do echo "$a"
done
1
2
3
exit 0
```

Code 3:

```
badname=`ls | grep ' '`
echo "$badname"
rm "$badname"
```

Output:

```
root@Bhavesh-17mis1079:~# sh -n vl2.sh
root@Bhavesh-17mis1079:~# sh -x vl2.sh
+ ls+ grep

+ bha=
+ echo

+ rm
rm: cannot remove '': No such file or directory
root@Bhavesh-17mis1079:~# sh -v vl2.sh
bha=`ls | grep ' '`
echo "$bha"

rm "$bha"
rm: cannot remove '': No such file or directory
```