Shell Script Codes

Open file with command vi <filename>.sh

1. Largest Among Three:

Code:

```
echo "Enter 3 numbers"
read a b c
if [ $a -gt $b -a $a -gt $c ]
then
    echo "$a is the biggest"
elif [ $b -gt $c ]
then
    echo "$b is the biggest"
else
    echo "$c is the biggest"
fi
```

Output:

```
[student@localhost ~]$ sh big3it.sh
Enter 3 numbers
1 2 3
3 is the biggest
[student@localhost ~]$ sh big3it.sh
Enter 3 numbers
3 2 1
3 is the biggest
[student@localhost ~]$ sh big3it.sh
Enter 3 numbers
1 3 2
3 is the biggest
```

2. Arithmetic Operations

Code:

```
echo "enter two numbers"
read a b
d=$(($a + $b))
e=$(($a - $b))
f=$(($a * $b))
g=$(($a / $b))
echo "Division in Floating"
echo "scale=2; $a / $b" | bc -l
echo "Addition= $d"
echo "Subtraction= $e"
echo "Multiplication= $f"
echo "Division= $g"
```

Output:

```
[student@localhost ~]$ sh addit.sh
enter two numbers
5 4
Division in Floating
1.25
Addition= 9
Subtraction= 1
Multiplication= 20
Division= 1
```

3. Leap Year

Code:

```
echo "Enter a year"
read y
a=$(($y%400))
b=$(($y%4))
c=$(($y%100))
if [ $a -eq 0 ]
then
        echo " $y is a leap year"

elif [ $c -ne 0 -a $b -eq 0 ]
then
        echo " $y is a leap year"
else
        echo " Not a leap year"
fi
```

Output:

```
[student@localhost ~]$ vi leap.sh
[student@localhost ~]$ sh leap.sh
Enter a year
2000
 2000 is a leap year
[student@localhost ~]$ sh leap.sh
Enter a year
200
 Not a leap year
```

4. Multiplication Table

Code:

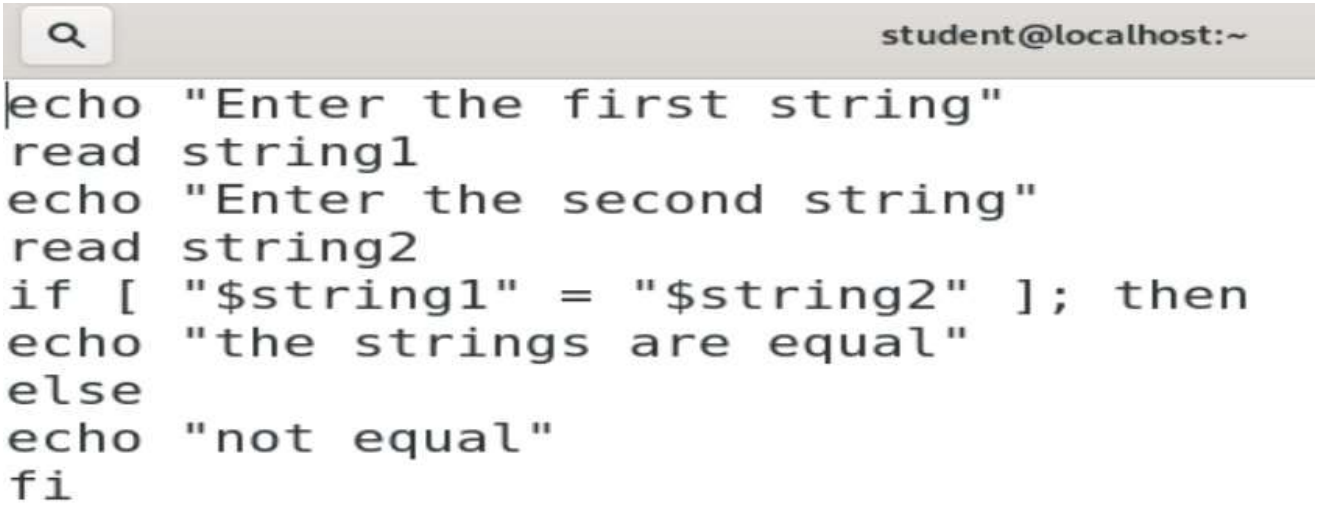
```
echo "Enter a number"
read n
echo "Table of $n is"
for((i=1;i<=10;i++))
do
        sum=$(($n*$i))
        echo "$n * $i = $sum"
done
```

Output:

```
[student@localhost ~]$ sh mult.sh
Enter a number
11
Table of 11 is
11 * 1 = 11
11 * 2 = 22
11 * 3 = 33
11 * 4 = 44
11 * 5 = 55
11 * 6 = 66
11 * 7 = 77
11 * 8 = 88
11 * 9 = 99
11 * 10 = 110
```

5. Compare two Strings

Code:



Output:

```
[student@localhost ~]$ vi compare.sh
[student@localhost ~]$ sh compare.sh
Enter the first string
hello
Enter the second string
hello
the strings are equal
[student@localhost ~]$ sh compare.sh
Enter the first string
hello
Enter the second string
hii
not equal
[student@localhost ~]$
```

6. Calculator Using Switch Case

Code:

```
echo "Enter two numbers with operators in between"
read a opr b
case $opr in
"+") echo $(($a + $b));;
"-") echo $(($a - $b));;
"*") echo $(($a * $b));;
"%") echo $(($a % $b));;
"/") echo $(($a / $b));;
esac
```

Output:

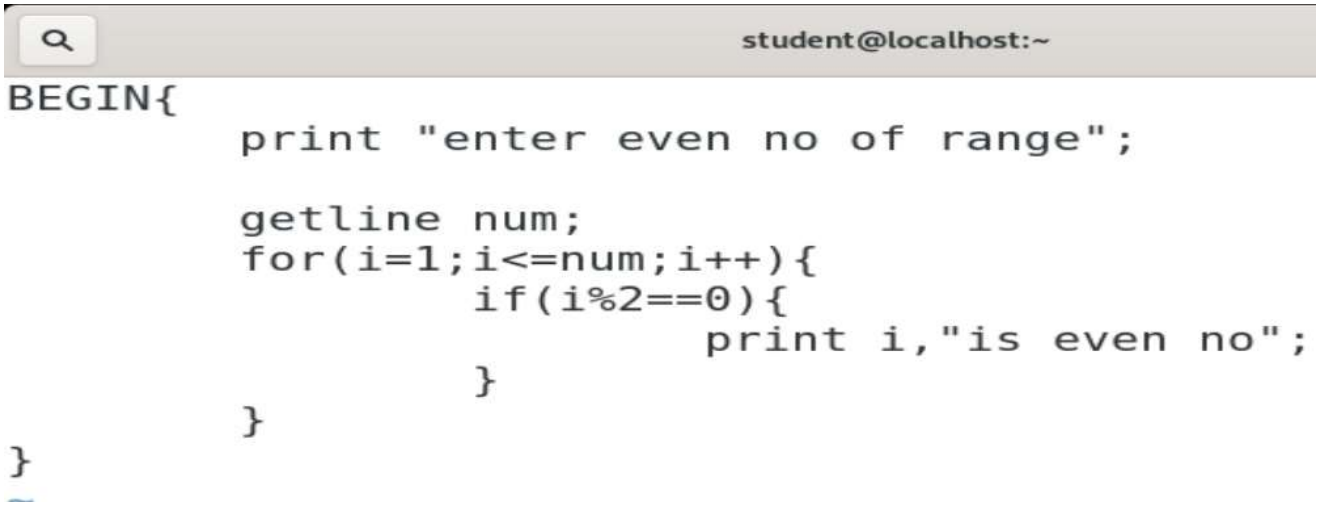
```
[student@localhost ~]$ vi switchcal.sh
[student@localhost ~]$ sh switchcal.sh
Enter two numbers with operators in between
10 + 5
15
[student@localhost ~]$ sh switchcal.sh
Enter two numbers with operators in between
10 - 5
5
[student@localhost ~]$ sh switchcal.sh
Enter two numbers with operators in between
10 / 5
2
[student@localhost ~]$ sh switchcal.sh
Enter two numbers with operators in between
10 * 5
50
[student@localhost ~]$
```

Awk Codes:

Open file with command vi <filename>.awk

1. Print Even numbers in a list

Code:



Output:

```
[student@localhost ~]$ vi evenrange.awk
[student@localhost ~]$ awk -f evenrange.awk
enter even no of range
10
2 is even no
4 is even no
6 is even no
8 is even no
10 is even no
```

2. Print Odd numbers in a List

Code:

```
BEGIN{
        print "enter odd no of range";

        getline num;
        for(i=1;i<=num;i++){
                if(i%2!=0){
                        print i,"is odd no";
                }
        }
}
```

Output:

```
[student@localhost ~]$ vi oddrange.awk
[student@localhost ~]$ awk -f oddrange.awk
enter odd no of range
9
1 is odd no
3 is odd no
5 is odd no
7 is odd no
9 is odd no
[student@localhost ~]$
```

3. Fibonacci series

Code:

```
BEGIN{
        a=0;b=1;
        print "Enter n"
        getline n;
        print a;
        print b;
        for(i=3;i<=n;i++)
        {
                t=a+b;
                print t;
                a=b;
                b=t;
        }
}
```

Output:

```
[student@localhost ~]$ vi fibon.awk
[student@localhost ~]$ awk -f fibon.awk
Enter n
10
0
1
1
2
3
5
8
13
21
34
```

Perl Script

Open file with command vi <filename>.pl

Code:

```
print"Enter a no.\n";
$n=<>;
$f=1;
for($i=2;$i<$n;$i++)
{
        if($n % $i == 0)
        {
                $f=0;
        }
}
if($f==0)
{
        print"not prime \n";
}
else{
        print"Prime \n";
}
```

Output:

```
[student@localhost ~]$ vi isprime.pl
[student@localhost ~]$ perl isprime.pl
Enter a no.
11
Prime
[student@localhost ~]$ perl isprime.pl
Enter a no.
12
not prime
```