

1. Prime number which sum of digit is 5:

```
echo 'enter lower limit'
read l
echo 'enter upper limit'
read u
for((j=l;j<=u;j++))
do
    c=0
    for((i=1;i<=j;i++))
    do
        if test `expr $j % $i` -eq 0
        then
            c=`expr $c + 1`
        fi
    done
    if test $c -eq 2
    then
        #echo $j
        s=0
        t=$j
        while test $t -ne 0
        do
            r=`expr $t % 10`
            s=`expr $s + $r`
            t=`expr $t / 10`
        done
        if test $s -eq 5
        then
            echo $j
        fi
    fi
done
```

2. Prime palindrome in range:

```
echo 'enter lower limit'
read l
echo 'enter upper limit'
read u
for((j=l;j<=u;j++))
do
    c=0
    for((i=1;i<=j;i++))
    do
        if test `expr $j % $i` -eq 0
        then
            c=`expr $c + 1`
        fi
    done
    if test $c -eq 2
    then
        #echo $j
        s=0
        t=$j
        while test $t -ne 0
        do
            r=`expr $t % 10`
            s=`expr $s \* 10 + $r`
            t=`expr $t / 10`
        done
        if test $s -eq $j
        then
            echo $s
        fi
    fi
done
```

3. String Palindrome:

```
echo 'enter a string'
read n
t=$n
s1=`echo $n | wc -c`
s=`expr $s1 - 1`
while test $s -ne 0
do
    b=`echo $n | cut -c$s`
    u=$u$b
    s=`expr $s - 1`
done
if test $u = $t
then
    echo 'Palindrome'
else
    echo 'not palindrome'
fi
```

4. Sum of even number and sum of odd number in given range:

```
echo 'enter lower lim'
read l
echo 'enter upper lim'
read u
e=0
o=0
for((i=1;i<=u;i++))
do
    if test `expr $i % 2` -eq 0
    then
        e=`expr $e + $i`
    else
        o=`expr $o + $i`
    fi
done
```

```
    fi
done
echo 'sum of even numbers = '$e
echo 'sum of odd numbers = '$o
```

5. Multiply of 3 in a number :

```
echo 'Enter a number'
read n
echo 'Multiple of 3 are : '
while test $n -ne 0
do
    r=`expr $n % 10`
    if test `expr $r % 3` -eq 0
    then
        echo $r
    fi
    n=`expr $n / 10`
done
```

9. find prime number from a given number:

```
echo 'Enter a number'
read n
v=0
while test $n -ne 0
do
    r=`expr $n % 10`
    c=0
    for((i=1;i<=r;i++))
    do
        if test `expr $r % $i` -eq 0
        then
            c=`expr $c + 1`
        fi
    done
done
```

```

if test $c -eq 2
then
    echo $r' prime'
    v=`expr $v + 1`
fi
n=`expr $n / 10`
done
if test $v -eq 0
then
    echo 'no prime found'
fi

```

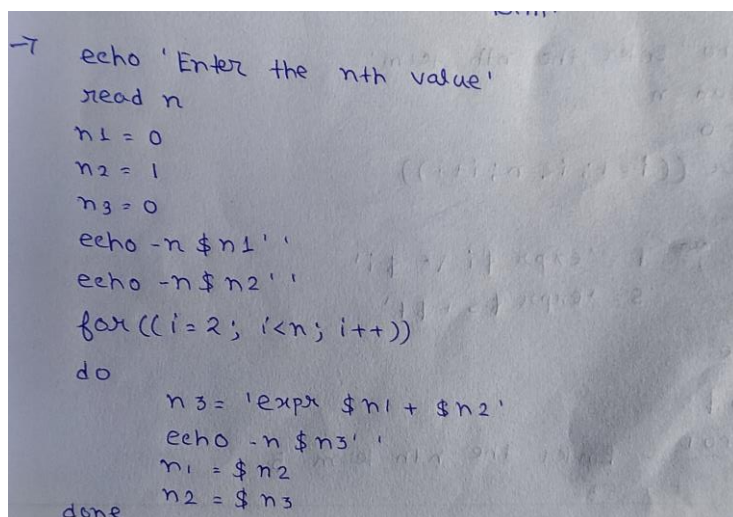
8.Reverse of a string:

```

echo 'enter a string'
read n
s1=`echo $n | wc -c`
s=`expr $s1 - 1`
while test $s -ne 0
do
    v=`echo $n | cut -c$s`
    u=$u$v
    s=`expr $s - 1`
done
echo $u

```

7.fibonacci series



```

→ echo 'Enter the nth value'
read n
n1 = 0
n2 = 1
n3 = 0
echo -n $n1 ' '
echo -n $n2 ' '
for ((i=2; i<n; i++))
do
    n3 = `expr $n1 + $n2`
    echo -n $n3 ' '
    n1 = $n2
    n2 = $n3
done

```

6. Kite pattern

127 Following Pattern



```
echo 'Enter the row'
```

```
read n
```

```
for ((i=0; i<n; i++))
```

```
do
```

```
    for ((j=n-i; j>1; j--))
```

```
    do
```

```
        echo -n ' '
```

```
    done
```

```
    for ((k=0; k<=i; k++))
```

```
    do
```

```
        echo -n ' * '
```

```
    done
```

```
    echo ''
```

```
done
```

```
m = `expr $n - 1`
```

```
for ((i=1; i<=m; i++))
```

```
do
```

```
    echo -n ' '
```

```
    for ((k=1; k<=i; k++))
```

```
    do
```

```
        echo -n ' '
```

```
    done
```

```
    for ((j=1; j<=m-i+1; j++))
```

```
    do
```

```
        echo -n ' * '
```

```
    done
```