```
parth@parth-HP-Laptop-15-di2xxx:~$ mkdir shell_scripting
parth@parth-HP-Laptop-15-di2xxx:~$ cd shell_scripting
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi hello.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat hello.sh
echo "Hello World"
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash hello.sh
Hello World
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi greeting.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat greeting.sh
greeting=Hola!!!
name=Parth
echo $greeting $name
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash greeting.sh
Hola!!! Parth
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi addition.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat addition.sh
echo "Enter a numner"
read a

echo "Enter a numner"
read b

var=$((a+b))
echo Addition = $var
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash addition.sh
Enter a numner
5
Enter a numner
8
Addition = 13
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi compare.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat compare.sh
read x
read y

if [ $x -gt $y ]
then
echo X is greater than Y
elif [ $x -lt $y ]
then
echo X is less than Y
elif [ $x -eq $y ]
then
echo X is equal to Y
fi
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash compare.sh
2
5
X is less than Y
```

```
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi triangle.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat triangle.sh
read a
read b
read c

if [ $a == $b -a $b == $c -a $a == $c ]
then
echo EQUILATERAL

elif [ $a == $b -o $b == $c -o $a == $c ]
then
echo ISOSCELES

else
echo SCALENE

fi
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash triangle.sh
3
4
5
SCALENE
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash triangle.sh
2
2
2
EQUILATERAL
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash triangle.sh
2
5
5
ISOSCELES
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi looping.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat looping.sh
for i in {1..10}
do
    echo $i
done
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash looping.sh
1
2
3
4
5
6
7
8
9
10
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$
```

```
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi sort.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat sort.sh
arr=(5 4 3 2 1)

n=${#arr[@]}

for ((i=0; i<n-1; i++))
do

    min=i

    for ((j=i+1; j<n; j++))
    do
        if [[ ${arr[j]} < ${arr[min]} ]]; then
            min=$j
        fi
    done

    temp=${arr[i]}
    arr[i]=${arr[min]}
    arr[min]=$temp
done

echo ${arr[@]}
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash sort.sh
1 2 3 4 5
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ vi search.sh
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ cat search.sh
arr=(3 2 6 8 1)

n=${#arr[@]}

search=8

found=0

for ((i=0; i<n; i++))
do
    if [[ ${arr[i]} == $search ]]; then
        echo "Element found at index $i"
        found=1
        break
    fi
done

if [[ $found == 0 ]]; then
    echo "Element not found in the array"
fi
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ bash search.sh
Element found at index 3
parth@parth-HP-Laptop-15-di2xxx:~/shell_scripting$ 
```