1.Count the number of directory and files in specific folder

```
#!/bin/bash
#specify the folder path
folder_path="/path/to/your/folder"
#count the number of directories
num_dirs=$(find "$folder_path" -type d | wc -l)
#count the number of files\
num_files=$(find "$folder_path" -type f | wc -l)
#print the counts
echo "Number of directories:  $num_dirs"
echo "Number of files:  $num_files"
```

2.find the smallest number from the array

```
#!/bin/bash
#define the array
array=(5 3 8 2 9 1)
#sort the array in ascending order
Sorted_array=($(printf "%s\n" "${array[@]}" | sort -n))
#extract the smallest number (first element after sorting)
Smallest=${sorted_array[0]}
#print the smallest number
echo "the smallest number is: $smallest"
```

3.find the sum of the array.

```
#!/bin/bashlements
#define the array

array=(5 3 8 2 9 1)
#initialize the variable
Sum=0
#loop through the array and sum the elements
for num in "${array[@]}"
do
 sum=$((sum + num))
done

#print the sum
echo "the sum of the array is  $sum"
```

4.display all the directory names.

```
#!/bin/bash

#specify the folder path
folder-path="/path/to/your/folder"

#list only directory names
Directories=$(ls -d "$folder_path"/*/)

#print the directory names
echo "directory names in $folder_path:"
echo "$directories"
```

5.check weather the number is palindrom or not

```
 is_palindrome()
{
local num=$1
local reversed=$(echo "$sum" | rev)

if [ "$num" == "$reversed" ]; then
   return 0   # palindrome
else
   return 1  # not palindrome
fi

#input number
Read -p "enter a number: " number

#check the number is palindrome
If is_palindrome "$number"; then
   echo "$number is a palindrome"
else
  echo "$number is not a palindrome"
fi
```