```
GAURAV@LAPTOP-VV800VIC ~
$ sum=0
i="y"
echo "Enter first number :"
read n1
echo "Enter second number :"
read n2
while [ $i = "y" ]
do
echo "1.Addition"
echo "2.Subtraction"
echo "3.Multiplication"
echo "4.Division"
echo "Enter your choice"
read ch
case $ch in
1)sum=`expr $n1 + $n2`
echo "Sum ="$sum;;
2)sub=`expr $n1 - $n2`
echo "Sub = "$sub;;
3)mul=`expr $n1 \* $n2`
echo "Mul = "$mul;;
4)div=`echo $n1 / $n2 | bc -1`
echo "Div = "$div;;
*)echo "Invalid choice";;
done $i != "y" ]to continue ?"
Enter first number :
1
Enter second number :
2
1.Addition
2.Subtraction
3.Multiplication
4.Division
Enter your choice
1
Sum = 3
Do u want to continue ?
```

```
GAURAV@LAPTOP-VV800VIC ~
$ arr=(2 43 -1 -33 24 12 -6)

for (( i = 0; i < ${#arr[@]}; ++i )); do
   if (( arr[i] > 0 )); then
      sum=`expr $sum + $i`
   fi
done
echo "$sum"
170
```

```
GAURAV@LAPTOP-VV800VIC ~

$ #!/bin/bash

my_array=("String 1" "String 2" "String 3")

if [ ${#my_array[@]} -lt 2 ]; then
    echo "The array does not have enough elements to perform concatenation."
    exit 1

fi

concatenated="${my_array[0]}${my_array[1]}"

echo "Concatenated Result: $concatenated"

Concatenated Result: $tring 1string 2
```

```
$ #!/bin/bash
# Specify the directory to loop through
directory="C:\cygwin64\home\GAURAV"
# Check if the directory exists
if [ -d "$directory" ]; then
    # Loop through files and directories in the specified directory
for item in "$directory"/*; do
    # Check if the item is a file
    if [ -f "$item" ]; then
        echo "File: $item"
          elif [ -d "$item" ]; then
               echo "Directory: $item"
          fi
     done
else
     echo "Directory does not exist."
Directory: C:\cygwin64\home\GAURAV/dir
File: C:\cygwin64\home\GAURAV/h
File: C:\cygwin64\home\GAURAV/lab.sh
File: C:\cygwin64\home\GAURAV/lab1.sh
File: C:\cygwin64\home\GAURAV/lab2.sh
File: C:\cygwin64\home\GAURAV/lab22.sh
File: C:\cygwin64\home\GAURAV/lab23.sh
File: C:\cygwin64\home\GAURAV/lab24.sh
File: C:\cygwin64\home\GAURAV/lab25.sh
File: C:\cygwin64\home\GAURAV/lab26.sh
Directory: C:\cygwin64\home\GAURAV/parth.txt
```

GAURAV@LAPTOP-VV800VIC ~

```
$ cat count_line.sh
#!/bin/bash

# Define the count_lines() function
count_lines() {
    if [ -f "$1" ]; then
        num_lines=$(wc -l < "$1")
        echo "The file '$1' contains $num_lines lines."
    else
        echo "Error: '$1' is not a valid file."
    fi
}

# Check if an argument is provided
if [ $# -eq 0 ]; then
    echo "Usage: $0 <filename>"
    exit 1
fi
# Call the count_lines() function with the provided filename as an argument
count_lines "$1"
```

GAURAV@LAPTOP-VV800VIC ~

```
GAURAV@LAPTOP-VV800VIC ~
$ chmod +x count_line.sh

GAURAV@LAPTOP-VV800VIC ~
$ ./count_line.sh
Usage: ./count_line.sh <filename>

GAURAV@LAPTOP-VV800VIC ~
$ ./count_line.sh lab22.sh
The file 'lab22.sh' contains 18 lines.
The file 'lab22.sh' contains 18 lines.
```

```
GAURAV@LAPTOP-VV800VIC ~
$ cat>>countlinefile.sh
#!/bin/bash
count_lines() {
   local total_lines=0
   for file in "$@"; do
       if [ -f "$file" ]; then
           num_lines=$(wc -l < "$file")
            total_lines=$((total_lines + num_lines))
       else
            echo "Error: '$file' is not a valid file." >&2
            return 1
       fi
   done
   return $total_lines
if [ $# -eq 0 ]; then
   echo "Usage: $0 <file1> <file2> ..."
   exit 1
fi
count_lines "$@"
lines_count=$?
if [ $lines_count -ne 1 ]; then
   echo "Total lines in all files: $lines_count"
fi
[3]+ Stopped
                              cat >> countlinefile.sh
GAURAV@LAPTOP-VV800VIC ~
$ chmod +x countlinefile.sh
GAURAV@LAPTOP-VV800VIC ~
$ ./countlinefile.sh lab22.sh lab23.sh
Total lines in all files: 43
GAURAV@LAPTOP-VV800VIC ~
$
```