**Q1**

# !/bin/bash

# Take user Input

echo "Enter Two numbers : "

read a

read b

# Input type of operation

echo "Enter Choice :"

echo "1. Addition"

echo "2. Subtraction"

echo "3. Multiplication"

echo "4. Division"

read ch

case $ch in

1)res=`echo $a + $b | bc`

;;

2)res=`echo $a - $b | bc`

;;

3)res=`echo $a \\* $b | bc`

;;

4)res=`echo "scale=2; $a / $b" | bc`

;;

esac

echo "Result : $res"

**Q2**

#!/bin/bash

my\_numbers=(5 10 15 20 25)

my\_sum=0

for my\_num in "${my\_numbers[@]}"; do

if [[ "$my\_num" =~ ^[0-9]+$ ]]; then

my\_sum=$((my\_sum + my\_num))

fi

done

echo "The sum of the integers in the array is: $my\_sum"

**Q3**

#!/bin/bash

my\_fruits=("kiwi" "banana" "apple")

my\_fruits+=("watermelon")

echo "${my\_fruits[@]}"

my\_fruit\_names=""

for my\_fruit in "${my\_fruits[@]}"; do

my\_fruit\_names="${my\_fruit\_names}${my\_fruit}"

done

echo "$my\_fruit\_names"

**Q4**

#!/bin/bash

my\_file\_path="/home/user/Documents/my\_text\_file.txt"

my\_line\_count=$(wc -l < "$my\_file\_path")

my\_word\_count=$(wc -w < "$my\_file\_path")

echo "Number of lines: $my\_line\_count"

echo "Number of words: $my\_word\_count"

**Q5**

#!/bin/bash

my\_file\_path="/home/user/Documents/my\_text\_file.txt"

my\_line\_count=$(wc -l < "$my\_file\_path")

my\_word\_count=$(wc -w < "$my\_file\_path")

echo "Number of lines: $my\_line\_count"

echo "Number of words: $my\_word\_count"

**Q6**

#!/bin/bash

my\_directory="/home/user/Documents/my\_directory"

for my\_item in "$my\_directory"/\*; do

if [ -f "$my\_item" ]; then

echo "File: $my\_item"

elif [ -d "$my\_item" ]; then

echo "Directory: $my\_item"

else

echo "Unknown: $my\_item"

fi

done