Ass.2

Test Cases:

Operations with correct Input Format:

```
File  Edit  View  Search  Terminal  Help
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 / 50
2
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 - 50
50
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 + 50
150
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x 50
5000
```

Invalid First or Second Number:

```
ahmed@ahmed-mekheimer:~$ bash testass.sh @ x 50
Invalid input in First Number: Numbers(+ve/-ve/Float) only.
ahmed@ahmed-mekheimer:~$ bash testass.sh ] x 50
Invalid input in First Number: Numbers(+ve/-ve/Float) only.
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x ;
Invalid input in Second Number: Numbers only.
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x ?
Invalid input in Second Number: Numbers only.
```

Invalid Operator:

```
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 ^ 50
Invalid Operator
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 4 50
Invalid Operator
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 = 50
Invalid Operator
ahmed@ahmed-mekheimer:~$
```

All Test Cases:

```
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 / 50
2
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 - 50
50
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 + 50
150
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x 50
5000
ahmed@ahmed-mekheimer:~$ bash testass.sh @ x 50
Invalid input in First Number: Numbers(+ve/-ve/Float) only.
ahmed@ahmed-mekheimer:~$ bash testass.sh ] x 50
Invalid input in First Number: Numbers(+ve/-ve/Float) only.
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x ;
Invalid input in Second Number: Numbers only.
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 x ?
Invalid input in Second Number: Numbers only.
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 ^ 50
Invalid Operator
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 4 50
Invalid Operator
ahmed@ahmed-mekheimer:~$ bash testass.sh 100 = 50
Invalid Operator
```

Bash File:

```bash
#!/bin/bash
num1=$1
operator=$2
num2=$3
if ! [[ $num1 =~ ^[+-]?[0-9]+([.][0-9]+)?$ ]] ; then
    echo "Invalid input in First Number: Numbers(+ve/-ve/Float) only."
    exit 1

elif ! [[ $num2 =~ ^[+-]?[0-9]+([.][0-9]+)?$ ]] ; then
    echo "Invalid input in Second Number: Numbers only."
    exit 1
fi

case $operator in
  +) echo "$num1 + $num2" | bc
  ;;
  -) echo "$num1 - $num2" | bc
  ;;
  /) echo "$num1 / $num2" | bc
  ;;
  x) echo "$num1 * $num2" | bc
  ;;

  *) echo "Invalid Operator"
  ;;
esac
```

```
ahmed@ahmed-mekheimer:~$ cat testass.sh
#!/bin/bash
num1=$1
operator=$2
num2=$3
if ! [[ $num1 =~ ^[+-]?[0-9]+([.][0-9]+)?$ ]] ; then
        echo "Invalid input in First Number: Numbers(+ve/-ve/Float) only."
        exit 1

elif ! [[ $num2 =~ ^[+-]?[0-9]+([.][0-9]+)?$ ]] ; then
        echo "Invalid input in Second Number: Numbers only."
        exit 1
fi

case $operator in
  +) echo "$num1 + $num2" | bc
  ;;
  -) echo "$num1 - $num2" | bc
  ;;
  /) echo "$num1 / $num2" | bc
  ;;
  x) echo "$num1 * $num2" | bc
  ;;

  *) echo "Invalid Operator"
  ;;
esac
```