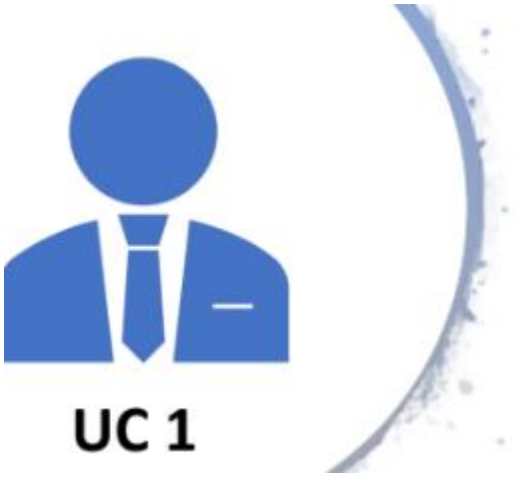
MAIN: After being merged

MINGW64:/c/Users/Shri/Testing_Bridge/repoPortal/repo3

```
  GNU nano 6.4                                  arithmatic.sh                                  Modified
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


# UC2
result1=$(awk "BEGIN {print $a + $b * $c}")

# UC3
result2=$(awk "BEGIN {print $a * $b + $c}")

# UC4
result3=$(awk "BEGIN {print $c + $a / $b}")

# UC5
result4=$(awk "BEGIN {print $a % $b + $c}")
echo "Result of a % b + c : " $result4

#UC6
declare -A results
results=( ["a + b * c"]=$result1 ["a * b + c"]=$result2 ["c + a / b"]=$result3 ["a % b + c"]=$result4 )

for key in "${!results[@]}"; do
  echo "Equation: $key - Result: ${results[$key]}"
done

# UC7
resultArray=()
for key in "${!results[@]}"; do
  resultArray+=("${results[$key]}")
done

j=1
for i in "${!results[@]}"; do
  echo "Result array element $j : ${results[$i]}"
  j=$((j+1))
done

# UC8
sortedDescending=( $(printf "%.2f\n" "${resultArray[@]}" | sort -nr) )
echo "Results in Descending Order: ${sortedDescending[@]}"

# UC9
sortedAscending=( $(printf "%.2f\n" "${resultArray[@]}" | sort -n) )

^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute     ^C Location    M-U Undo
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line  M-E Redo
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (main)
$ sh arithmatic.sh
Enter the value of a: 4
Enter the value of b: 5
Enter the value of c: 6
Result of a % b + c :  10
Equation: a * b + c - Result: 26
Equation: c + a / b - Result: 6.8
Equation: a % b + c - Result: 10
Equation: a + b * c - Result: 34
Result array element 1 : 26
Result array element 2 : 6.8
Result array element 3 : 10
Result array element 4 : 34
Results in Descending Order: 34.00 26.00 10.00 6.80
Results in Ascending Order: 6.80 10.00 26.00 34.00
```

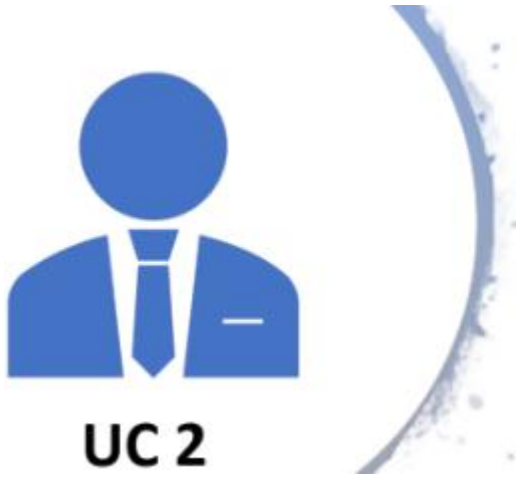


UC 1

Write program to take three inputs – a, b & c

```
  GNU nano 6.4                                    arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc1)
$ sh arithmatic.sh
Enter the value of a: 3
Enter the value of b: 5
Enter the value of c: 6
```

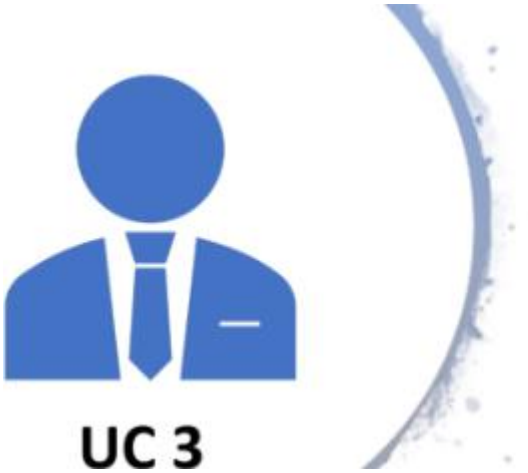


UC 2

Compute a + b * c

```
  GNU nano 6.4                                    arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


#UC2
result1=$(awk "BEGIN {print $a + $b * $c}")
echo "Result of a + b * c : " $result1
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc2)
$ sh arithmatic.sh
Enter the value of a: 2
Enter the value of b: 4
Enter the value of c: 6
Result of a + b * c :  26
```

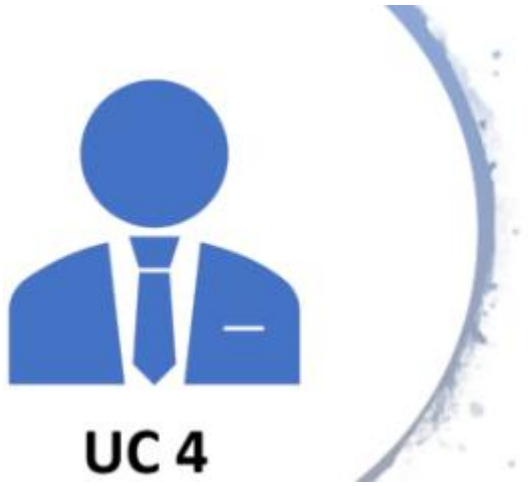


Compute a * b + c

- Assume Part time Hour is 8

```
  GNU nano 6.4                                    arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


#UC3
result2=$(awk "BEGIN {print $a * $b + $c}")
echo "Result of a * b + c : " $result2
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc3)
$ sh arithmatic.sh
Enter the value of a: 4
Enter the value of b: 67
Enter the value of c: 8
Result of a * b + c :  276
```



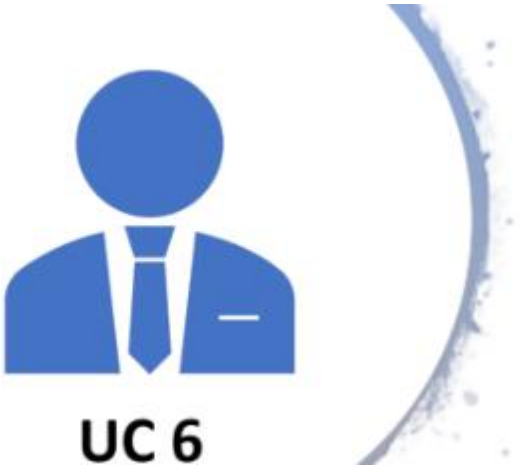
Compute c + a / b

```
  GNU nano 6.4                                    arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


#UC4
result3=$(awk "BEGIN {print $c + $a / $b}")
echo "Result of c + a / b : " $result3
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc4)
$ sh arithmatic.sh
Enter the value of a: 3
Enter the value of b: 523
Enter the value of c: 6
Result of c + a / b :  6.00574
```


```
  GNU nano 6.4                                    arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


#UC5
result4=$(awk "BEGIN {print $a % $b + $c}")
echo "Result of a % b + c : " $result4
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc5)
$ sh arithmatic.sh
Enter the value of a: 12
Enter the value of b: 4
Enter the value of c: 6
Result of a % b + c :  6
```

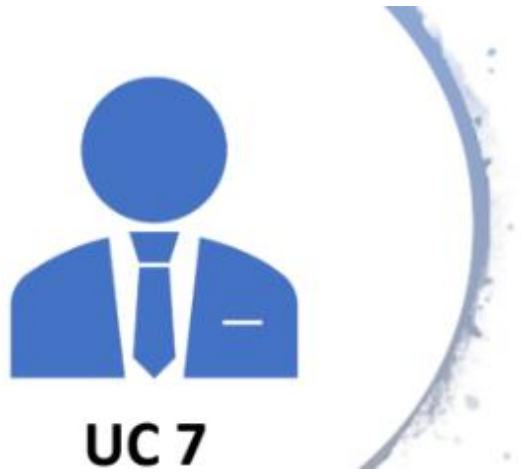


UC 6

Store the results in a Dictionary for every Computation

```
  GNU nano 6.4                                arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


# UC2
result1=$(awk "BEGIN {print $a + $b * $c}")

# UC3
result2=$(awk "BEGIN {print $a * $b + $c}")

# UC4
result3=$(awk "BEGIN {print $c + $a / $b}")

# UC5
result4=$(awk "BEGIN {print $a % $b + $c}")

#UC6
declare -A results
results=( ["a + b * c"]=$result1 ["a * b + c"]=$result2 ["c + a / b"]=$result3 ["a % b + c"]=$result4 )

for key in "${!results[@]}"; do
  echo "Equation: $key - Result: ${results[$key]}"
done
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc6)
$ sh arithmatic.sh
Enter the value of a: 44
Enter the value of b: 33
Enter the value of c: 12
Equation: a * b + c - Result: 1464
Equation: c + a / b - Result: 13.3333
Equation: a % b + c - Result: 23
Equation: a + b * c - Result: 440
```

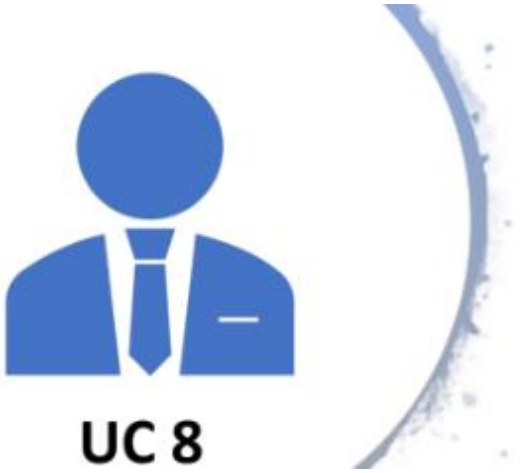


UC 7

Read the values from the Dictionary into the array

```
  GNU nano 6.4                                arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


# UC2
result1=$(awk "BEGIN {print $a + $b * $c}")

# UC3
result2=$(awk "BEGIN {print $a * $b + $c}")

# UC4
result3=$(awk "BEGIN {print $c + $a / $b}")

# UC5
result4=$(awk "BEGIN {print $a % $b + $c}")

#UC6
declare -A results
results=( ["a + b * c"]=$result1 ["a * b + c"]=$result2 ["c + a / b"]=$result3 ["a % b + c"]=$result4 )

for key in "${!results[@]}"; do
  echo "Equation: $key - Result: ${results[$key]}"
done

# UC7
resultArray=()
for key in "${!results[@]}"; do
  resultArray+=("${results[$key]}")
done

j=1
for i in "${!results[@]}"; do
  echo "Result array element $j : ${results[$i]}"
  j=$((j+1))
done
```

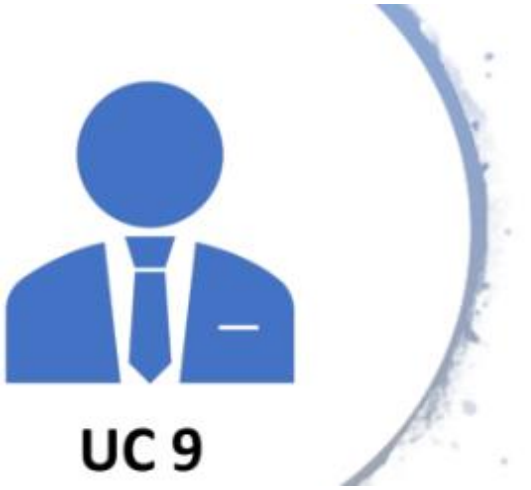
```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc7)
$ sh arithmatic.sh
Enter the value of a: 32
Enter the value of b: 53
Enter the value of c: 21
Equation: a * b + c - Result: 1717
Equation: c + a / b - Result: 21.6038
Equation: a % b + c - Result: 53
Equation: a + b * c - Result: 1145
Result array element 1 : 1717
Result array element 2 : 21.6038
Result array element 3 : 53
Result array element 4 : 1145
```



Sort the results to show the Computation Result in the Descending Order

```
  GNU nano 6.4                                  arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


# UC2
result1=$(awk "BEGIN {print $a + $b * $c}")

# UC3
result2=$(awk "BEGIN {print $a * $b + $c}")

# UC4
result3=$(awk "BEGIN {print $c + $a / $b}")

# UC5
result4=$(awk "BEGIN {print $a % $b + $c}")

#UC6
declare -A results
results=( ["a + b * c"]=$result1 ["a * b + c"]=$result2 ["c + a / b"]=$result3 ["a % b + c"]=$result4 )

for key in "${!results[@]}"; do
  echo "Equation: $key - Result: ${results[$key]}"
done

# UC7
resultArray=()
for key in "${!results[@]}"; do
  resultArray+=("${results[$key]}")
done

j=1
for i in "${!results[@]}"; do
  echo "Result array element $j : ${results[$i]}"
  j=$((j+1))
done

# UC8
sortedDescending=( $(printf "%.2f\n" "${resultArray[@]}" | sort -nr) )
echo "Results in Descending Order: ${sortedDescending[@]}"
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc8)
$ sh arithmatic.sh
Enter the value of a: 324
Enter the value of b: 25
Enter the value of c: 6
Equation: a * b + c - Result: 8106
Equation: c + a / b - Result: 18.96
Equation: a % b + c - Result: 30
Equation: a + b * c - Result: 474
Result array element 1 : 8106
Result array element 2 : 18.96
Result array element 3 : 30
Result array element 4 : 474
Results in Descending Order: 8106.00 474.00 30.00 18.96
```



Sort the results to show the Computation Value in Ascending Order

```
  GNU nano 6.4                                  arithmatic.sh
#UC1
read -p "Enter the value of a: " a
read -p "Enter the value of b: " b
read -p "Enter the value of c: " c


# UC2
result1=$(awk "BEGIN {print $a + $b * $c}")

# UC3
result2=$(awk "BEGIN {print $a * $b + $c}")

# UC4
result3=$(awk "BEGIN {print $c + $a / $b}")

# UC5
result4=$(awk "BEGIN {print $a % $b + $c}")

#UC6
declare -A results
results=( ["a + b * c"]=$result1 ["a * b + c"]=$result2 ["c + a / b"]=$result3 ["a % b + c"]=$result4 )

for key in "${!results[@]}"; do
  echo "Equation: $key - Result: ${results[$key]}"
done

# UC7
resultArray=()
for key in "${!results[@]}"; do
  resultArray+=("${results[$key]}")
done

j=1
for i in "${!results[@]}"; do
  echo "Result array element $j : ${results[$i]}"
  j=$((j+1))
done

# UC8
sortedDescending=( $(printf "%.2f\n" "${resultArray[@]}" | sort -nr) )
echo "Results in Descending Order: ${sortedDescending[@]}"

# UC9
sortedAscending=( $(printf "%.2f\n" "${resultArray[@]}" | sort -n) )
echo "Results in Ascending Order: ${sortedAscending[@]}"
```

```
Shri@PRODUCTIVITY-4 MINGW64 ~/Testing_Bridge/repoPortal/repo3 (uc9)
$ sh arithmatic.sh
Enter the value of a: 23
Enter the value of b: 52
Enter the value of c: 5
Equation: a * b + c - Result: 1201
Equation: c + a / b - Result: 5.44231
Equation: a % b + c - Result: 28
Equation: a + b * c - Result: 283
Result array element 1 : 1201
Result array element 2 : 5.44231
Result array element 3 : 28
Result array element 4 : 283
Results in Descending Order: 1201.00 283.00 28.00 5.44
Results in Ascending Order: 5.44 28.00 283.00 1201.00
```