Lab Assignment-03

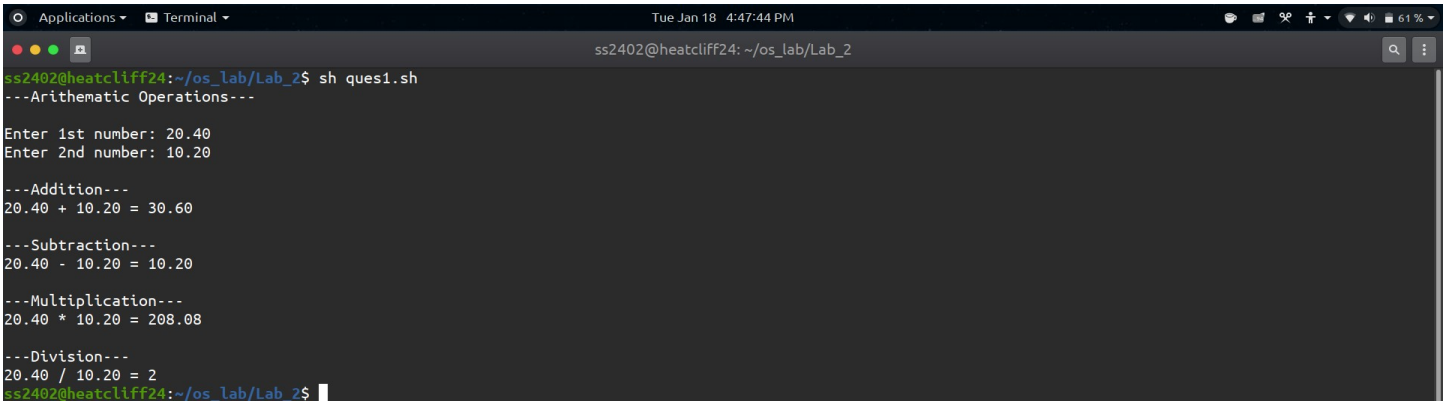
ROLL: 2005535 | NAME: SAHIL SINGH | DATE: 18/01/22

QUES 1: WAS to perform all the arithmetic operation of two integers and display the results.

SOLUTION:

```
echo "---Arithematic Operations---\n"
read -p "Enter 1st number: " num1
read -p "Enter 2nd number: " num2
echo "\n---Addition---"
sum=`echo $num1 + $num2|bc`
echo "$num1 + $num2 = $sum"
echo "\n---Subtraction---"
sub=`echo $num1 - $num2|bc`
echo "$num1 - $num2 = $sub"
echo "\n---Multiplication---"
mul=`echo $num1 \* $num2|bc`
echo "$num1 * $num2 = $mul"
echo "\n---Division---"
div=`echo $num1 / $num2|bc`
echo "$num1 / $num2 = $div"
```

OUTPUT:



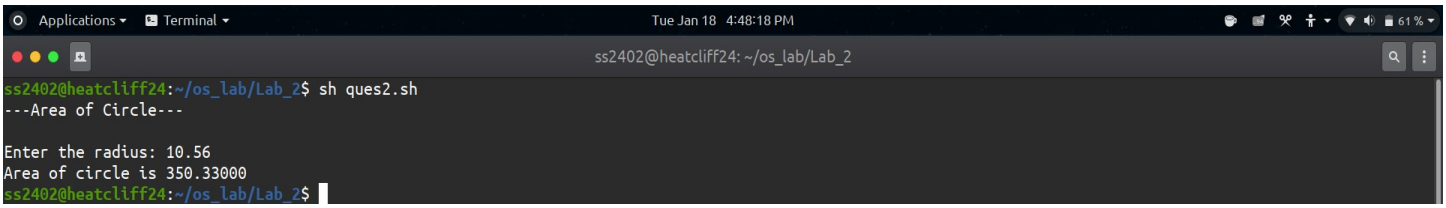
QUES 2: WAS to calculate the area of a circle.

SOLUTION:

```
echo "---Area of Circle---\n"
read -p "Enter the radius: " radius
```

```
area=`echo 3.14159 \* $radius \* $radius|bc`
echo "Area of circle is $area"
```

OUTPUT:

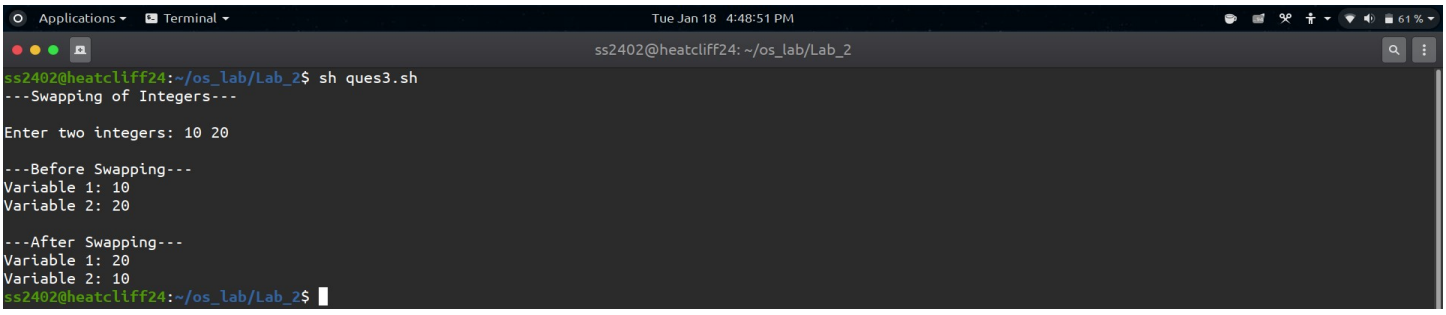


QUES 3: WAS to swap two integer numbers without using a third variable.

SOLUTION:

```
echo "---Swapping of Integers---\n"
read -p "Enter two integers: " num1 num2
echo "\n---Before Swapping---"
echo "Variable 1: $num1"
echo "Variable 2: $num2"
num1=`expr $num1 + $num2`
num2=`expr $num1 - $num2`
num1=`expr $num1 - $num2`
echo "\n---After Swapping---"
echo "Variable 1: $num1"
echo "Variable 2: $num2"
```

OUTPUT:



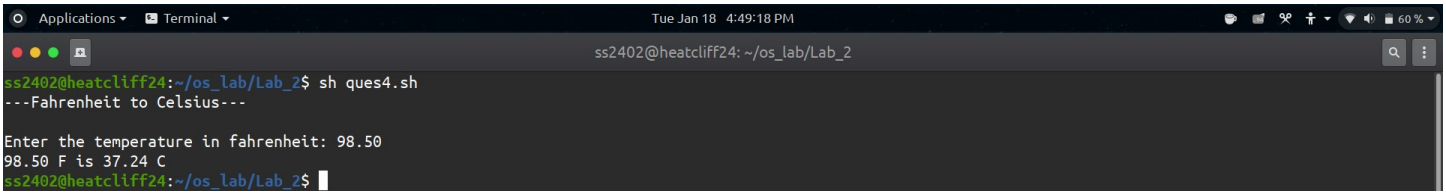
QUES 4: WAS to find centigrade for a given Fahrenheit temperature.

SOLUTION:

```
echo "---Fahrenheit to Celsius---\n"
read -p "Enter the temperature in fahrenheit: " fahr
cels=`echo "($fahr - 32) * 0.56"|bc`
```

```
echo "$fahr F is $cels C"
```

OUTPUT:



QUES 5: WAS to convert given second into its equivalent hour, minute and second as per the following format. Example. 7560 second = 2 Hour, 6 Minute and 0 Second.

SOLUTION:

```
echo "---Seconds into HH:MM:SS---\n"
read -p "Enter Seconds: " sec
hour=`echo "($sec / 3600)"|bc`
mins=`echo "($sec - (3600 * $hour)) / 60"|bc`
sec=`echo "($sec - (3600 * $hour) - ($mins * 60))"|bc`
echo "HH:MM:SS: $hour hours $mins mins $sec seconds"
```

OUTPUT: