

Day 06 (set-C) Assignment Solutions

1. Help user find °F or °C based on their Conversion Selection. Use Case Statement and ensure that the inputs are within the Freezing Point (0 °C / 32 °F) and the Boiling Point of Water (100 °C / 212 °F).

(HINTS: °F = (°C * 9/5) + 32 and °C = (°F - 32) * 5/9)

```
CODE: #!/bin/bash/
echo "1.Convert Celsius temperature into Fahrenheit"
echo "2.Convert Fahrenheit temperatures into Celsius"
read -p "Enter Choice=" Choice
case $Choice in
    1)echo "1.Convert Celsius temperature into Fahrenheit"
    read -p "Enter temp in °C:" celsius
        if [[ $celsius -ge 0 && $celsius -le 100 ]]
        then
            printf %.2f "$((1000000000 * (($celsius*9)) + 160))/5 )e-9"
            echo " °F"
        else
            echo "Please Enter value Between 0°C and 100°C"
        fi
    ;;
    2)echo "2.Convert Fahrenheit temperatures into Celsius"
    read -p "Enter temp in °F:" fahrenheit
        if [[ $fahrenheit -ge 32 && $fahrenheit -le 212 ]]
        then
            printf %.2f "$((1000000000 * (($fahrenheit*5)) - 160))/9 )e-9"
            echo " °C"
        else
            echo "Please Enter value Between 32°F and 212°F"
        fi
    ;;
    *) echo "Wrong Choice"
esac
```

OUTPUT:

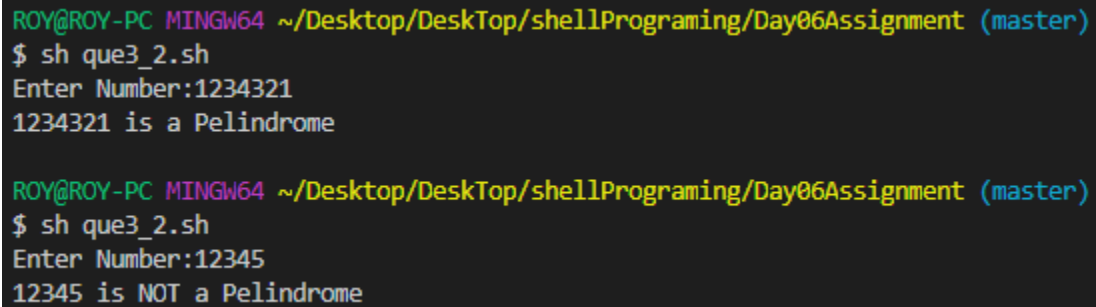
```
ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_1.sh
1.Convert Celsius temperature into Fahrenheit
2.Convert Fahrenheit temperatures into Celsius
Enter Choice=2
2.Convert Fahrenheit temperatures into Celsius
Enter temp in °F:100
37.78 °C

ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_1.sh
1.Convert Celsius temperature into Fahrenheit
2.Convert Fahrenheit temperatures into Celsius
Enter Choice=1
1.Convert Celsius temperature into Fahrenheit
Enter temp in °C:200
Please Enter value Between 0°C and 100°C
```

2. Write a function to check if the two numbers are Palindromes.

```
CODE: #!/bin/bash/
function pelindrome()
{
    read -p "Enter Number:" number
    original_number=$number
    while [[ $number -gt 0 ]]
    do
        Last_digit=$(( $number % 10 ))
        number=$(( $number / 10 ))
        Reverse_no=$(( echo ${Reverse_no}${Last_digit} ))
    done
    if [ $original_number -eq $Reverse_no ]
    then
        echo "$original_number is a Pelindrome"
    else
        echo "$original_number is NOT a Pelindrome"
    fi
}
pelindrome
```

OUTPUT:



```
ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_2.sh
Enter Number:1234321
1234321 is a Pelindrome

ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_2.sh
Enter Number:12345
12345 is NOT a Pelindrome
```

3. Take a number from user and check if the number is a Prime then show that its palindrome is also prime

- Write function check if number is Prime
- Write function to get the Palindrome
- Check if the Palindrome number is also prime

```
CODE: function read_value()
{
    read -p "Enter Number:" number
}

function check_prime()
{
    number=$@
    for (( i=2;i<$number;i++ ))
    do
```

```

        if [ $$number%i -eq 0 ]
        then
            echo $number" is NOT a Prime Number"
            exit
        fi
    done
    echo $number" is a Prime Number"
    return $number
}
function get_prlindrom()
{
    number=$@
    original_number=$number
    while [[ $number -gt 0 ]]
    do
        Last_digit=$(( $number%10 ))
        number=$(( $number/10 ))
        Reverse_no=$(( echo ${Reverse_no}${Last_digit} ))
    done
    if [ $original_number -eq $Reverse_no ]
    then
        echo "$original_number is a Pelindrome "
    else
        echo "$original_number is NOT a Pelindrome"
    fi
    number=$Reverse_no
    return $number
}
read_value
check_prime $number
get_prlindrom $number
check_prime $number

```

OUTPUT:

```

ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_3.sh
Enter Number:11
11 is a Prime Number
11 is a Pelindrome
11 is a Prime Number

ROY@ROY-PC MINGW64 ~/Desktop/DeskTop/shellPrograming/Day06Assignment (master)
$ sh que3_3.sh
Enter Number:67
67 is a Prime Number
67 is NOT a Pelindrome
76 is NOT a Prime Number

```