

Help user find degF or degC 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)

a. degF = (degC * 9/5) + 32

b. degC = (degF – 32) * 5/9

```
#!/bin/bash -x
echo "1.Celsius temperature into Fahrenheit"
echo "2.Fahrenheit temperatures into Celsius"
echo -n "Select your choice (1-2) : "
read choice
if [ $choice -eq 1 ]
then
    echo -n "Enter temperature (C) : "
    read tc
    tf=$(echo "scale=2;((9/5) * $tc) + 32" |bc)
    echo "$tc C = $tf F"
elif [ $choice -eq 2 ]
then
    echo -n "Enter temperature (F) : "
    read tf
    tc=$(echo "scale=2;(5/9)*($tf-32)"|bc)
    echo "$tf = $tc"
else
    echo "Please select 1 or 2 only"
fi
```

Write a function to check if the two numbers are Palindromes

```
#!/bin/bash -x
function palindrome(){
local $n=$1
r=0
while [ $n != 0 ]
do
    r=$r*10
    r=$(( $r+$n%10 ))
    n=$(( $n/10 ))
done
echo $r
}
read -p "enter the number" n;
a=$n
reverse="$(palindrome $n) "
if [ $reverse -eq $a ]
```

```

        then
            echo no is palindrome
        else
            echo no is not palindrome
    fi

```

Take a number from user and check if the number is a Prime then show

that its palindrome is also prime

a. Write function check if number is Prime

b. Write a function to get the Palindrome.

c. Check if the Palindrome number is also prime

```

#!/bin/bash -x
function prime(){
    local $n=$1
    flag=0
    for (( c=2; c<=$n/2; c++ ))
        do
            d=$(( $n % $c ))
            if [ $d -eq 0 ]
            then
                flag=1
            fi
        done

    local $n=$1
    if [ $n -eq 1 ]
    then
        echo $n is not prime or composite
    elif [ $flag -eq 0 ]
    then
        echo $n is prime
    else
        echo $n is composite
    fi
}

```

```

function palindrome(){
    local $n=$1
    r=0
    while [ $n != 0 ]
        do
            r=$(( $r * 10 + $n % 10 ))
            n=$(( $n / 10 ))
        done
    if [ $r -eq $n ]
    then
        echo $n is palindrome
    else
        echo $n is not palindrome
    fi
}

```

```
                r=$((r+$n%10))
                n=$((n/10))
            done
        echo $r
    }

    read -p "enter the number to be checked= " n;
    a=$n
    Answer="$(prime $n)"
    echo $Answer
    reverse="$(palindrome $n)"
    if [ $reverse -eq $a ]
    then
        echo no is palindrome
    else
        echo no is not palindrome
    fi
```