

Lab-7

- The version of scheme i use was through replit scheme compiler i use that because it was easy to use and compile the code
- For the reference i had helped from this manual <https://www.gnu.org> also i watched couple of video of tutorial.
- Description: Purpose of this programme is to convert temperature.
- Temperature Fahrenheit to Celsius and convert back to Celcius from the Fahrenheit.
- Variables we're gonna use are C-to-F temp and F-to-C temp.
- Input and output for the code C to F
 - 20 C will be converted to 63 F
 - 10 C will be converted to 14 F
- Input and output for the code F to C
 - 110 F will be converted to 43.333333333333336 C
 - 30 F will be converted to -1.1111111111111112 C
- How the solution will look like for C to F
 - First we need to give value to temp so let's say we have c-to-f=30
 - And then we gonna display result using This Formula
 $\text{degree} \times 1.8 + 32.0$ (30*1.8+32.0=82.4)
- How the solution will look like For F to C
 - First we need to give value to the temp so lets say we have F-C = 10
 - And than we gonna use display result (display (/ (* (- temp 32) 5) 9))) to print the result

C to F

```
; function definition of c-f() with an argument temp(temp = 30)
(define (c-to-f temp)

  ; calculate the Fahrenheit by calculating
  degree*1.8+32.0(30*1.8+32.0=82.4) and then display the result
  (display (+(* 1.8 temp) 32.0)))

; call the function c-f with an argument 30
(c-f 30)
```

F to C

```
; function definition of F-to-C() with an argument temp(temp = 20)
(define (F-C temp)
```

```
  ; calculate the celcius by calculating degree Subtract 32 From
temp and than multiply that with 5/9.((temp-32)*(5/9)) and then
  display the result
```

```
(display (/ (* (- temp 32) 5) 9)))
```

```
; call the function F-to-C with an argument 20
(F-C 30)
```