# Kieran Yalla

Programming Project 2

- // Kieran Yalla
- // Class: CMSC140 CRN
- // Instructor: Professor Koo
- // Programming Project 2
- // Write a program that presents itself and interacts with the user, using country and 2 numbers as inputs
- // I pledge that I have completed the programming assignment independently.
- // I have not copied the code from a student or any source.
- // I have not given my code to any student.
- // Print your Name here: Kieran Yalla

Test Case #	Input	Actual Input	Expected Output	Actual Output	Did the test pass?
1	USA Choice 1 Temp 18	USA 1 18	64	It is 64 in Fahrenheit. USA sounds fun!	Yes
2	India Choice 2 Distance -5	India 2 -5	Error message	Distance should not be negative. India sounds fun!	Yes
3	Japan Choice 3 Kilograms 78	Japan 3 78	171.6	It is 171.6 in pounds. Japan sounds fun!	Yes
4	Mexico Choice 4	Mexico 4	Program stops	Mexico sounds fun!	Yes

#### **TEST #1:**

```
1. Temperature Converter
2. Distance Converter
3. Weight Converter
4. Quit
Enter your choice (1-4): 1
Please enter temperature in Celcius (such as 24): 18
It is 64 in Fahrenheit.
USA sounds fun!
Thank you for testing my program!!
Programmer: Kieran Yalla
CSMC140 Common Project 2
Due Date: 10/05/21
...Program finished with exit code 0
Press ENTER to exit console.
```

## **TEST #2:**

```
1. Temperature Converter
2. Distance Converter
3. Weight Converter
4. Quit
Enter your choice (1-4): 2
Please enter distance in Kilometers (such as 18.54): -5
Distance should not be negative
India sounds fun!

Thank you for testing my program!!
Programmer: Kieran Yalla
CSMC140 Common Project 2
Due Date: 10/05/21

...Program finished with exit code 0
Press ENTER to exit console.
```

#### **TEST #3:**

```
1. Temperature Converter
2. Distance Converter
3. Weight Converter
4. Quit
Enter your choice (1-4): 3
Please enter weight in Kilograms (such as 81.4): 78
It is 171.6 in pounds.
Japan sounds fun!
Thank you for testing my program!!
Programmer: Kieran Yalla
CSMC140 Common Project 2
Due Date: 10/05/21
...Program finished with exit code 0
Press ENTER to exit console.
```

## **TEST #4:**

```
Converter Toolkit

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1. Temperature Converter

2. Distance Converter

3. Weight Converter

4. Quit
Enter your choice (1-4): 4
Mexico sounds fun!

Thank you for testing my program!!
Programmer: Kieran Yalla
CSMC140 Common Project 2
Due Date: 10/05/21

...Program finished with exit code 0
Press ENTER to exit console.
```

## **PSEUDO CODE:**

- 1. START
- 2. Ask user for country
- 3. Print 4 toolkit options
- 4. Get input 1-4 from user

If Input is not 1-4 then error and restart program

If input is 1 then ask for temp in celsius

Get input from the user then print "(country name) sounds fun!" then proceed to step 5

If input is 2 then ask for distance in km

Get input from user

If input <0 print error message then proceed to step 5

Calculate and print distance in miles

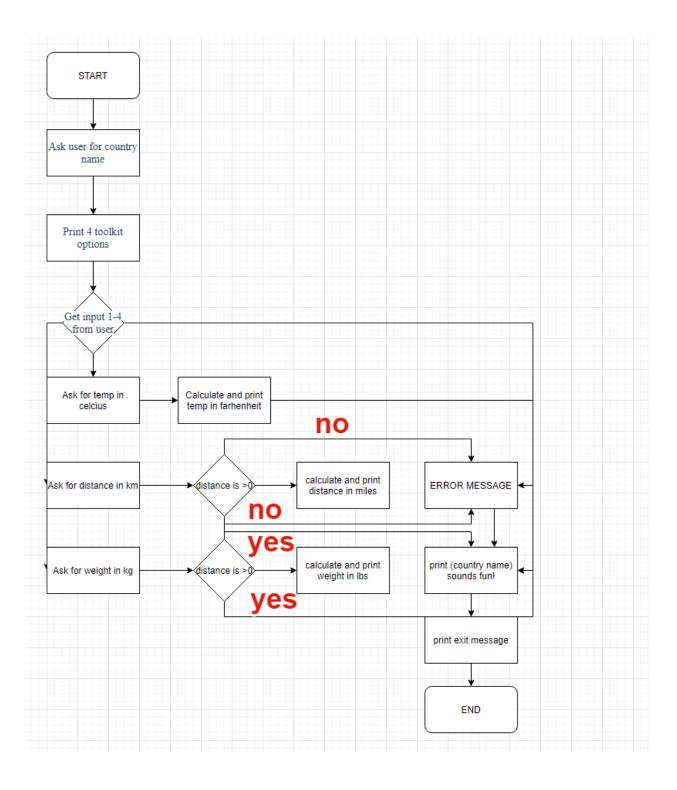
If input is 3 ask for weight in kg

Get input from user

If input <0 print error message then proceed to step 5

Calculate and print weight in lbs

- 5. Print "(country name) sounds fun!"
- 6. Print exit message
- 7. Exit program



# **Lesson Learned:**

- Infinite loops: While loops are very useful for menus when you need the user to return to the same menu, either because he needs to or because he chose a wrong option. However, you need to be careful of the logic to end exit the while loop or you will find yourself in an infinite loop.
- The code in the switch part could be simplified with functions, in order to be more readable and in that way, allowing the while loop logic to be clearer.