NAME: SARCOL, JOSHUA S **DATE:** 12/13/2023

Final Exam B | CO2 - Code Implementation

Design the logic solution (PSEUDOCODE and PROGRAM) that allows a user to enter 10 numbers, then displays each number and if its ABOVE, BELOW or EQUAL to the numeric average of the numbers entered.

Function Prototypes:

```
float calculateAverage(int numArray[]);
void printNumStatusAverage(int numArray[], float average);
```

Kindly observe proper use of functions. The main() should handle the input and output processes unless otherwise stated by the given problem.

PSUEDOCODE: sarcol_FE_algo3

main()

START

1. INITIALIZE list as integer array of size 10
2. INITIALIZE average as float
3. FOR (int i = 0; i < 10; i++)
    1. PROMPT and GET list[i]
4. ENDFOR
5. CALL module, average = calculateAverage(list)
6. PRINT average, *average*
7. CALL module, printNumStatusAverage(list, average)

STOP

calculateAverage(numArray[])

1. INITIALIZE sum to 0
2. FOR (int i = 0; i < 10; i++)
    1. ADD sum by numArray[i], sum += numArray[i]
3. ENDFOR

RETURN sum/10

printNumStatusAverage(numArray[], average)

1. INITIALIZE word as character array of size 6
2. FOR(int i = 0; i < 10; i++)
    1. IF numArray[i] > average
        1. SET word to ABOVE
    2. ELSE IF numArray[i] < average
        1. SET word to BELOW
    3. ELSE
        1. SET word to EQUAL
    4. ENDIF
    5. PRINT phrase indicating status relative to average, *numArray[i]*: *word* the average
3. ENDFOR

RETURN