Checklist – using Pointer

Following requirements for function interface definitions

Requirements

- Make a function called getDouble()
  - Parameter : double *pNumber
  - Change getNum() function to use easily
  - Return : when input value is pointed by parameter : 1, invailed : 0.
- Make a function called calculateStats()
  - Parameters
    - double d1, d2, d3, d4
    - double *pAverage : fill with average d1,d2,d3,d4
    - double *pSum : fill with sum of d1,d2,d3,d4
  - return : none
  - calculate average and sum of the number gotten by user
  - once calculated, average gets put into pointed pAverage, sum as well
  - this function should be 2 lines
- Make a function called calculateArrayStats()
  - Parameters
    - Double values[]
    - Int numArray : number of array elements
    - Double *pSum : pointer to a variable filled with sum of all elements.
    - Double *pAverage : pointer to a variable filled with average of all elements.
  - Return : none
  - Takes an array of number, given the number of elements as paramter
  - once calculated, average gets put into pointed pAverage, sum as well

- make a function called fillArray()
  - parameters
    - double values[]
    - int numArray : number of array elements
    - double fillValue : value to put into array elements.
  - Return : none
  - This function fills elements into array
- Main
  - Declare four double variable to get number from user
    - If floating-point numbers are invalid, quit the program

- Declare double average and sum variable
- Call calculateStats() to pass the six variable as appropriate
- Display the average and sum with comment
- Declate an array of seven doubles
  - If floating-point numbers are invalid, quit the program
- Call calculateArrayStats() to pass array, average, and sum
- Display average and sum with comment
- Call fillArray() to change all of the array element value to 40
- On a single line, display all elements of the array, separated by ',' do not put , at the end of element
- Return : 0
- Do not use global variables

- Other
  - calculateArrayStats(), fillArray(), do not use a fixed size for array
  - use best practice with respect to Magic Numbers
  - do not creater a pointer to use solely argument → just pass address