











#### **Algorithm**

#### main()

- 1. call function welcomePage()
- 2. initialize while loop.
- 3. make the loop call mainMenu() function, the mainMenu() function will then return 1, if true. and return 0, if false.
- 4. if mainMenu() returns 1,
  - a. create variable size, then initialize size, to getSize() function, getSize() function returns integer
  - b. create a 2d float array, initialize its rows to size, and columns to 4
  - c. call function clearArray().
  - d. call function benchMarks().
  - e. call function turningPoints().
  - f. call function compute().
  - g. call function displayTable().
  - h. create a condition if the user wants to retry the program, if user chose 'y', the loop will excecute once again. else it will break.
- 5. if mainMenu() returns 0, the loop will terminate immediately and end the program

### getSize()

- 1. ask user to input a number.
- 2. return inputted number and increment by 2.

## clearArray()

- 1. get parameters (size).
- 2. create a for loop and run it by how much size the array has.
- 3. assign each of array 0.

# turningPoints()

- 1. create a for loop and excecute it base of size.
- 2. for each loop. check if index is divisible by 2,
- 3. if divisible by 2, ask for user input.
- 4. else, do nothing.
- 5. if for loop condition is false, stop the function

## compute()

- 1. create a for loop and excecute it base of size.
- 2. for each loop. add 0 and 3rd index and assign it to 1st index.
- 3. also subtract the first index and 2nd index of next row, assign it to the 3rd index of the next row.
- 4. after the condition turns false, stop the function.

## checkingPart()

- 1. create a for loop base on array size.
- 2. get the sum of all first columns and assign them to tBS.
- 3. get the sum all 3rd columns and assign it to tFS.
- 4. display tBS and tFS