Chapter 6 Farrell Programming Exercises

Exercise 5a Flowchart & Pseudocode.

```
start
    Declarations
        num CLASSES = 5
        num CLASS_NUMBERS[] = 1, 2, 3, 4, 5
        string CLASS_NAME[] = "Yoga 1", "Yoga 2", "Children's Yoga",
                              "Prenatal Yoga", "Senior Yoga"
        num inClassNum
        num x
        string chosenClass

    input inClassNum

    for x = 0; x < CLASSES; step 1
        if inClassNum = CLASS_NUMBERS[x] then
            chosenClass = CLASS_NAME[x]
        endif
    endfor

    output chosenClass
stop
```
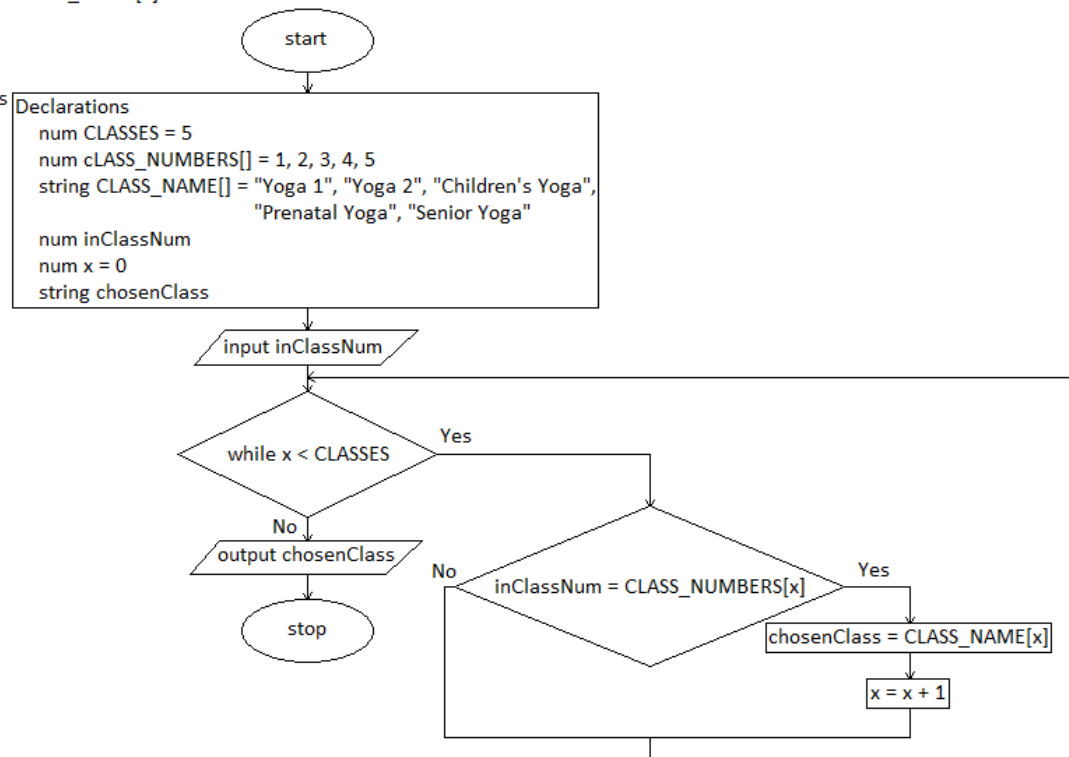
Exercise 5b Flowchart & Pseudocode.


```
start
    Declarations
        const num CLASSES = 5
        num cLASS_NUMBERS[] = 1, 2, 3, 4, 5
        string CLASS_NAME[] = "Yoga 1", "Yoga 2", "Children's Yoga",
                              "Prenatal Yoga", "Senior Yoga"

        num INPUTS[100]
        num inClassNum
        num x, i
        const num END = 999
        num numberCount = 0
        num requests = 0
        bool foundIt = false

    input inClassNum

    while inClassNum != END
        for x = 0; x < CLASSES AND foundIt == false; step 1
            if inClassNum = CLASS_NUMBERS[x] then
                foundIt = true
                INPUTS[numberCount] = inClassNum
                ++numberCount
            endif
        endfor

        if foundIt = false then
            output "Numbers must be within range"
        endif

        foundIt = false
        input inClassNum
    endwhile

    --numberCount

    for x = 0; x < CLASSES; step 1
        for i = 0; i <= numberCount; step 1
            if CLASS_NUMBERS[x] = INPUTS[i] then
                ++requests
            endif
        endfor
        if requests > 0 then
            output CLASS_NUMBERS[x] , CLASS_NAME[x] , requests
        endif
        requests = 0
    endfor
stop
```