

Assignment 1 Sorting Circles

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COMP 110 Object Oriented Programming

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1. My circleSort Algorithm

In this assignment, I have implemented a circle sort algorithm with using random sort method. I generate randomArray, fill this array with 10 random values, plot circles with using these values and ascending sort them.

The details of my algorithm is explained below.

1. I generate randomArray and fill it 10 random numbers with using randomNumGenerator.
2. I generate a number integer and equal it 10 random numbers which between 0 and 35.
3. Then I equal number to randomArray's i. index for using these random numbers to plot circles.
4. I write my randomSort method (I will explain this method in the end.)
5. I generate another for loop to plot 10 circles with random values.
6. I write in myText.setX and setCenterX ($100 + i * 80$) because I centre circles and plot them in a sequence.
7. I write setRadius and setText (randomArray[i]) because I plot and text circles radius with random numbers which I have generated.
8. I generate a randomSort method.
9. I generate 3 integer temp for temporary values swapping, random 1 random 2 for swap values.(100000 times swap to sort $i < 100000$)
10. In if and if else blocks these random numbers swapping each other till swapping ends.

2. Sample Outputs

In this section, I provide two outputs of my program. In Figure 1, you see circles before the sort operation. In Figure 2, I provide another example where circles after the sort operation.

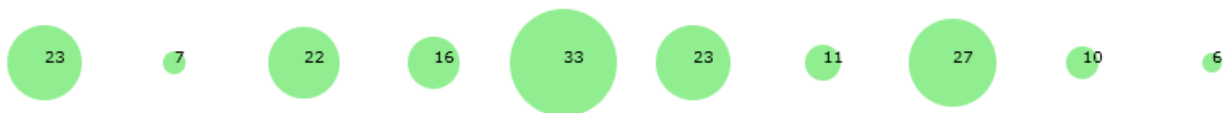


Figure 1. Circles before the sort operation.

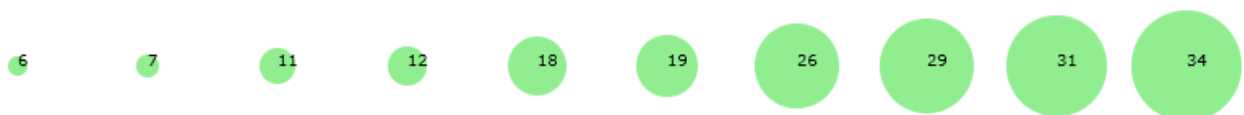


Figure 2. Circles after the sort operation.