1. JudgeScores

Write a ConsoleProgram named JudgeScore. The program reads the scores (double values) of several judges from the user. After all the scores are entered, the program allows querying a judge score by reading the judge's order from the user. If the given judge index does not exist, the program prints an appropriate message; if the user enters 0, the program prints the total points and exists. The total points is calculated by excluding the minimum and maximum scores. A sample output is given below:

```
Enter number of judges (a positive number needed): 5
Enter score of judge 1: 4.5
Enter score of judge 2: 3.0
Enter score of judge 3: 2.8
Enter score of judge 4: 8.3
Enter score of judge 5: 5.1
Which judge's score? (enter 0 to exit): 3
Judge 3 gave 2.8 points.
Which judge's score? (enter 0 to exit): 5
Judge 5 gave 5.1 points.
Which judge's score? (enter 0 to exit): -1
No such judge.
No such judge.
Which judge's score? (enter 0 to exit): 8
No such judge.
Which judge's score? (enter 0 to exit): 1
Judge 1 gave 4.5 points
Which judge's score? (enter 0 to exit): 5
Judge 5 gave 5.1 points.
Which judge's score? (enter 0 to exit): 2
Judge 2 gave 9.0 points.
Which judge's score? (enter 0 to exit): 0
Total points excluding min and max is 17.900000000000002
```

Instructions:

a. First, implement the base code where you read the number of judges from the user, create an array of double values with the correct length, and then read as many values into the array as there are judges.

b. Next, implement a while-loop in the run() method where you continuously read an id number from the user that denotes the number of a judge. You then print the score given by that judge. A valid id is a number between 1 and the number of judges, inclusive. If the id entered by the user is invalid, print “No such judge”. If the id is 0, exit the loop.

c. Finally, implement three methods. First one is named sum: takes an array of double values and returns the sum of the elements. Second method is named min: takes an array of double values and returns the minimum element. Last method is named max: takes an array of double values and returns the maximum element.

d. Use the methods you implemented in the previous step to compute and print the total score. Total score is the sum of all scores except the minimum and the maximum.