Problem 1: Backwards

Please submit `backwards.cpp` that reads a word and prints the word in reverse. For example, if the user provides the input "Harry", the program prints,

`yrraH`

Please have the output formatted like the following examples: (the `Mary backward` are user input)

```
Enter word: Mary
Backwards: yraM
```

```
Enter word: backward
Backwards: sdrawkcab
```

- **Headers:** You may only use the following headers: `<iostream>` and `<string>`.

- **No invalid inputs:** You do NOT have to worry about the user giving invalid inputs like numbers, etc.

- Hint: loop

Problem 2: Second Smallest

Write a program `second.cpp` that takes in a sequence of integers, and prints the second smallest number. Note that in the case of repeated numbers, we really mean the second smallest out of the distinct numbers (as seen in the examples below). Also, if there is only one number, or all the numbers are the same, the second smallest number equals to that value.

Please have the output formatted like the following examples:

```
Enter integers (Q to quit): 1 2 1 8 8 9 Q
Second smallest: 2
```

```
Enter integers (Q to quit): -7 -101 0 -2 17 Q
Second smallest: -7
```

```
Enter integers (Q to quit): 1 1 2 2 Q
Second smallest: 2
```

```
Enter integers (Q to quit): 1 Q
Second smallest: 1
```

- **Headers:** You may only use the headers: `<iostream>`.

- **No invalid inputs:** You do NOT have to worry about the user giving invalid inputs like characters except `Q`, really large numbers, etc.

Instructions:

- All code must be written originally by yourself. You are not allowed to (even partially) copy code from anyone else. Incident of cheating or plagiarism will be reported to the Dean's office and results in a zero grade in this assignment.

- (5pt) Write two programs to solve above questions. Name your files `backwards.cpp` and `second.cpp`, and submit them to Gradescope. You must name the files EXACTLY as instructed, otherwise 2.5 points will be deducted each.

- (5pt) Add declaration in the beginning of each cpp file to show the ownership.

- (10pt) Write your code with good practice as introduced in class.

- (Problem 1 40pt & Problem 2 40pt) Code compiles with Visual Studio 2022 and solves the questions. Students may lose the majority of points if their code doesn't compile with VS 2022.

  To receive full credits, the output must look EXACTLY the same as instructed above, including words, spaces, symbols, etc. Your code should not only work for the above examples, but also work for other different inputs.