

Coding Challenge

Problem

Write a function that decides whether a given String contains a set of consecutive numbers (either ascending or descending).

Examples:

```
isConsecutive("12345") -> true
```

```
// Contains a set of consecutive ascending numbers, i.e. 1, 2, 3, 4, 5
```

```
isConsecutive("12131415") -> true
```

```
// Contains a set of consecutive ascending numbers, i.e. 12, 13, 14, 15
```

```
isConsecutive("122121120119118") -> true
```

```
// Contains a set of consecutive descending numbers, i.e. 122, 121, 120, 119, 118
```

```
isConsecutive("12312412516") -> false
```

```
// Does not contain a set of consecutive numbers, regardless of how you group the digits
```

Please also include a text file detailing any assumptions, considerations, or limitations, and/or any other useful information about your solution.

Notes

The purpose of the challenge is to understand how you approach problems, and use this code as a conversation point in an interview.

You should feel free to make any reasonable assumptions necessary to produce a working solution that you would feel happy to use as the basis of some production-ready code.

Please write code in the same style you would use normally in your job.

The challenge should take around 30-60 minutes to complete. If you can't implement everything you want in around an hour, submit what you can get working in that time, and just state what else you wanted to do (and how you were planning to do it) in a separate text file.

You're free to define any data structures / methods / classes you need, as long as you can implement them using standard Java classes (i.e. classes included in a standard Oracle JDK distribution). Avoid using external dependencies where reasonably possible (although 100% standard stuff like Maven or JUnit is fine).

A simple zip file containing the code and any other files (e.g. README file etc.) is fine.

There are no marks for writing extra code just for the sake of it. A simple, elegant solution is preferable to a complex, verbose one.

We're obviously not expecting fully-fledged production-ready code. But as far as possible in the time constraints, try to write to a style and standard you would use for production code. Also please include in your submitted notes any additional work that would be needed before you would consider it production-ready.