Site Reliability Engineer Assignment

Introduction: Hello! We are very happy that you decided to work on our programming homework, it will be fun, we promise! ;-)

The idea of the exercise is not to write the perfect solution, but rather to get a better feeling of your problem solving skills, your coding style and the tools you decide to use.

This will make the following interviews much easier for you since you have already shown your technical skills.

Description

There are three parts in this exercise.

As the first part, please implement the following algorithms in Python:

- Calculating a Fibonacci number F(n) with the value of n provided by the user.
- The Ackermann function A(m,n) with values of m and n provided by the user.
- The factorial of a non-negative integer n provided by the user.

As the second part, please implement the web service using the framework of your choice to make each function available via different endpoints.

The last part is to provide monitoring for your application where you will monitor the metrics you deem important from an operational and optimisation aspect.

Deliverables

You will need to send over your code in the email thread you got the assignment from, along with instructions on installing and running your code, an explanation of your choices.

The minimum expected is a readme file, but you can do it as nice as you want, it will definitely give you points.

Conditions

Please implement the algorithms in the exercise on your own. You are not allowed to use any code you might find online, neither to publish your solution or this document without our explicit consent. For any questions that might arise, please ask in the email thread.

Good luck!