Hello, dear HR at ReadyTech. Firstly, I would like to express my gratitude for giving me this opportunity to take the technical test. I truly value this chance and I am eager to showcase a better and more comprehensive version of myself. Allow me to explain why I chose to use the Python language for this technical test.

Firstly, I am currently revising and learning some new Python coding concepts, which makes Python the language I am most familiar with at the moment. Therefore, I decided to use it for this requirement.

Secondly, it is regrettable, but it is a fact that I have not previously used .NET Core to develop an HTTP API like this requirement. Hence, I realized this and started learning it.

Here are some advantages and disadvantages of using Python:

Advantages:

1. \*\*Familiarity and Learning:\*\* Python is a language I am currently revising and learning, so I am quite familiar with it. This familiarity allows me to work efficiently and effectively in Python.

2. \*\*Flexibility:\*\* Python is known for its flexibility, allowing developers to write code that is easy to understand and maintain. This flexibility makes Python suitable for various tasks, including web development.

3. \*\*Rich Ecosystem:\*\* Python has a rich ecosystem with a vast collection of libraries and frameworks that facilitate development. This ecosystem enables developers to leverage existing tools and resources to build robust and scalable solutions.

4. \*\*Community Support:\*\* Python has a large and active community of developers who contribute to its growth and development. This community provides support, guidance, and resources to help developers overcome challenges and improve their skills.

Disadvantages:

1. \*\*Performance:\*\* Python is an interpreted language, which may result in slower execution compared to compiled languages like C++ or Java. This performance overhead may be significant for certain applications, especially those that require high computational power.

2. \*\*Global Interpreter Lock (GIL):\*\* Python's Global Interpreter Lock (GIL) can restrict multi-threaded concurrency, limiting performance in CPU-bound tasks. While asynchronous programming and multiprocessing can mitigate this issue, they introduce complexity and overhead.

3. \*\*Dependency Management:\*\* Python's dependency management system, while functional, may not be as robust as that of other languages like Java. Managing dependencies in Python projects can sometimes be challenging, particularly in complex projects with many dependencies.

In conclusion, despite its advantages, Python may have limitations in terms of performance, concurrency, and dependency management. However, its ease of learning, flexibility, rich ecosystem, and strong community support make it a popular choice for various development tasks, including web development.