DevOps Engineer Technical Exercise

This exercise gives you the opportunity to demonstrate not only your knowledge of what is required to run **a secure, scalable and performant application in production** but also a **re-usable, efficient and elegant SDL automation**. Generally speaking, it is better to write longer answers which contain more argumentation or comparisons, than it is to write brief answers. This gives you more opportunity to demonstrate your expertise. The exercise is based upon the accompanying code archive. Please submit responses as PDF, docx or Google Docs URL (*do not* rewrite/fix code).

Scenario

A member of your team has developed a self-contained application in Python and automation scripts required for this application to be build, provisioned and deployed to AWS. You, as a DevOps/SRE assigned to the project, are responsible for bringing this project to production but also to integrate it well with company's software delivery best practices.

Questions

1. Describe the steps necessary for this project to go through to be in shape for production in "real life".
2. Describe any issues and/or bugs this code is likely to produce.
3. Highlight any areas of the code that might cause reliability or security concerns.
4. Describe the steps required to deploy the application in high availability, taking into account best practices for making infrastructure and deployments repeatable and consistent.
5. What steps would you take to enable the application to handle peaks of traffic.