Intro

Please write a blog post for **<u>one</u>** of the following exercises. If any details of the exercise are unclear, please ask for clarification.

Please timebox your work on the exercise to **<u>four hours or less</u>**, and please keep the word count to **<u>less than 2,000 words</u>**. It is acceptable to return an incomplete exercise.

Option 1 - Automation API

Demonstrate the value of the Pulumi Automation API. Explain what is the Automation API, the problems it solves, and how to use it for solving those problems. Show Automation API code as an inline program, local program, or through a REST API that executes Pulumi programs.

Use **<u>one</u>** of AWS, Azure, or Google Cloud and [your language of choice](#).

At a minimum your Pulumi application code should consist of:
- An Automation API program
- A Pulumi program

Success criteria:
- Should be able to programmatically provision infrastructure directly from within an application and not through the Pulumi CLI.

Option 2 - Kubernetes Application

Demonstrate the value of using Pulumi to manage Kubernetes infrastructure. Explain what Pulumi is and how it can be used to manage Kubernetes applications. Show Pulumi code to deploy the cluster infrastructure and manage a public-facing Kubernetes resources (e.g., web page) within the cluster.

Use **<u>one</u>** of AWS, Azure, Google Cloud, or Digital Ocean and [your language of choice](#).

At a minimum your Pulumi application code should consist of:
- A Dockerfile to build your custom docker image
  - Suggestion: use [this gist](#) as your starting app and Docker image. Modify the application to read a configurable value via an environment variable.
- A Kubernetes cluster
- Relevant Kubernetes resources to deploy and run the Docker image

Success criteria:
- Should be able to load and interact with the Kubernetes resource