As part of the beBit evaluation process, we would like to see a sample of your technical and critical thinking skills, as well as a small sample of your technical writing ability.

From the following exercises below, please complete it within a week. Please submit your work in digital form (archived into a ZIP file format if there is more than one file) to beBit within one (1) week of receiving this assignment.

For somebody who is familiar with the technology below, it shouldn't take you more than an hour at most to complete the assignment.

You may use the internet to help you and research the topic and possible answers, but please do not directly copy code or text from the internet unless the answer is trivial.

1. Code Exercise: Terraform and ETL

   Create an AWS Data Pipeline using Terraform. This pipeline should aggregate information (in a structure and format of your choosing) that resembles a web-based transaction of some kind. The information should be aggregated by date/timestamp.

   After doing this, repeat the exercise using AWS Glue version instead of AWS Data Pipeline.

   Briefly summarize the differences between AWS Data Pipeline and AWS Glue.

2. Code Exercise: Kubernetes

   Create a batch process that counts date/timestamps using CronJob of Kubernetes.

   Submit either a Python script or a Java program, as well as a manifest file for operation, that works as a Kubernetes job.

   Provide a small explanation regarding how it works.