1) What have you created using Go?

MUFG Bank is currently utilizing a Golang application to handle transaction information. The bank uses a MySQL database to manage the transaction data, and based on the status code of the transactions, alerts are prepared and sent to relevant internal applications and teams using SQS queues and SNS notifications, including transaction ID.

The application is deployed on AWS EC2 instances, and MUFG Bank uses Jenkins for pipelines to automate the deployment process. The source code is managed using GitHub.

In collaboration with the data engineering team, MUFG Bank also works on developing ML models for application metrics analysis, and log analysis. These models are trained using raw data exports and tested in pre-production environments using actual production metric data dumps. The bank utilizes TensorFlow to train and deploy the models. These strategies are put in place to ensure system reliability and minimize downtime to ensure transactions are executed securely and efficiently.

2) What have you done in Kafka?

MUFG Bank utilizes Apache Kafka for reliable and asynchronous communication between different business applications and teams. This is achieved through the implementation of Golang microservices, which process messages within the Kafka cluster. Kafka is used to build real-time data pipelines and transfer data from various applications and teams, ensuring that there is a reliable and efficient exchange of data. This approach is crucial to the development and analysis of several applications, as it ensures that data is transferred and consumed in a timely and reliable manner, leading to the development of robust and efficient applications.

3) Experience with ML algorithms?

As part of my work at MUFG Bank, I have utilized machine learning techniques based on Golang and Python for data analysis. At MUFG Bank, we evaluate the API metric data to prepare for the robust architecture of the systems. We use the metrics of the application to predict the needs for scaling and managing resources with the setup threshold such that the systems have minimum downtime. The data is obtained from health metrics and logs to analyze and prepare the systems.

Additionally, I have coordinated with the data engineering team to write and deploy ML models at MUFG Bank. These models are used to perform market analysis and predict the return on investments and interest trends for various products based on location and other key data. These predictions help MUFG Bank in determining pricing strategies and risk management data for other teams to work with. This approach helps in making informed decisions and maximizing profits while minimizing risks for the bank.

4) What is your experience with TensorFlow? If no TensorFlow framework, which one have you worked on? What have you created with it?

As part of my work at MUFG Bank, I have hands-on experience in developing and deploying end-to-end machine learning systems using TensorFlow and PyTorch. We have created simple convolutional neural networks for the ML models and have used TensorFlow and PyTorch to train and test these models before deploying them once the appropriate tests are passed.

The choice of tool is dependent on the existing systems and the language of development. Currently, at MUFG Bank, we are using TensorFlow as the development is done in a combination of Golang and Python.ss