

Application Developer Test

Instructions

This is a take-home technical test for the Application Developer role. You are expected to complete all 5 questions. Submit your solutions with the individual Python (.py) files provided in the src folder, one per question, packaged into a single ZIP file. Please ensure your code is well-structured, readable, and includes comments where necessary.

Questions

- 1 Q1. Write a Python function that takes a list of integers and returns a dictionary with keys 'even' and 'odd', containing lists of even and odd numbers respectively.
- 2 Q2. Write a Python program that reads a text file named 'input.txt', counts how many times each word appears, and saves the result into 'output.txt' in the format: word: count.
- 3 Q3. Write a Python class 'BankAccount' that supports deposit, withdraw, and balance inquiry. Raise an exception if a withdrawal is attempted with insufficient funds.
- 4 Q4. Create an Azure Function with an HTTP trigger in Python. The function should accept a JSON payload with two numbers and return their sum in JSON format. (Filename: http_sum_function/__init__.py)
- 5 Q5. Create an Azure Function with a Queue trigger in Python. The function should process messages containing usernames and log a greeting message for each. (Filename: queue_greet_function/__init__.py)