Stack and Queue

1. **Implement a stack-based calculator that can evaluate postfix expressions. The calculator should support basic arithmetic operations: addition, subtraction, multiplication, and division.**

2. **Write a Python function to check whether the given expression has balanced parentheses. The expression can contain parentheses, square brackets, and curly braces.**

3. **Implement a task scheduler that can execute tasks based on their priority. Tasks are added to the scheduler with a priority number. The scheduler should execute tasks in the order of their priority (tasks with higher priority are executed first).**

4. **Design a food ordering system where your python program will run two threads,**

i. **Place Order: This thread will be placing an order and inserting that into a queue. This thread places new order every 0.5 second. (hint: use time.sleep(0.5) function)**

ii. **Serve Order: This thread will server the order. All you need to do is pop the order out of the queue and print it. This thread serves an order every 2 seconds. Also start this thread 1 second after place order thread is started.**

Pass following list as an argument to place order thread,

orders = ['pizza','samosa','pasta','biryani','burger']

This problem is a producer-consumer problem where place_order thread is producing orders whereas server_order thread is consuming the food orders.