CSCI 204 In-Class Activity

Priority queues

Student name(s):

Note: submit the work at the end of the class.

An incomplete linked list implementation of priority queue and a test program are given at the course website.

Complete the enqueuer() method so that the test program works correctly. The enquene() method finds the right place for the new node in the linked list and insert there. The completed dequeuer() method always removes and returns the first item in the list.

Note: the queue consists of PriorityNode which has a data field and a next link, the data field contains the data (item) and a priority.

```
class PriorityNode:
      def __init__(self, data):
          self.data = data
          self.next = None


class PriorityEntry:
    def __init__(self, item, priority):
        self.item = item
        self.priority = priority

def enqueuer(self, item, priority):
      # 1. make a new entry (PriorityEntry) that contains item and priority
      # 2. make a new node (PriorityNode) that contains the entry and next
      # 3. insert the new node in a correct place
```