COM2067
LAB 3

In this lab, you are expected to design a double-linked list structure that represents each node as a process.

The following information is stored for each process:

- Process ID: A unique integer value
- Priority: A lower value represents a higher priority
- Processing Time: The duration of the process (a lower value means the process will take less time).

For the lab question, perform the following operations:

- When a new task is added to the list, it should be added in order of priority:
  - The process with the lower priority value is placed first in the list.
  - If two processes have the same priority value, the new node should be added last.
- Deletion should be performed by deleting the highest priority process (lowest priority, shortest processing_time in case of a tie).

Examine the files provided for sample input/output. Your main file is as follows:

```
int main() {
   Node* head = NULL;
   int num, prio, time;
   while (1) {
      scanf("%d", &num);
      if (num == -1)
         break;
      scanf("%d %d", &prio, &time);
      head = insertOrdered(head, num, prio, time);
   }
   printList(head);

   head = deleteByPriority(head);
   printList(head);

   return 0;
}
```