

Trước khi nộp:

- Clean and build project để tạo ra thư mục dist
- Đổi tên thư mục dist thành run

Nộp bài

- Nén thư mục Q1 thành Q1.zip hoặc Q1.rar
- Nộp file vừa nén lên lms

Question: (5 marks)

In this question you should complete some methods in **MyList.java** file.

The class **Laptop** with 3 data members: **producer**, **weight** and **price** is given and you do not need to edit it. The **MyList** class is a linked list of **Laptop** objects. The following methods should be completed:

- void **addLast**(String xProducer, int xWeight, int xPrice).
(Note: xWeight and xPrice must be bigger than 0).
- void **f1()** – Do not edit this method. Your task is to complete the **addLast(...)** method above only. Output in the file **f1.txt** must be the following:

(H,6,7) (C,4,5) (Y,5,8)

- void **f2()** – There are 2 given **Laptop** objects **v**, **w** in this function. Suppose the list contains at least 3 elements. Write statements to insert **v** and **w** to the list so that **w** will be the 2nd, **v** will be the 3rd node. Output in the file **f2.txt** must be the following:

(D,4,7) (E,9,2) (Q,7,6)

(D,4,7) **(W,1,7) (V,8,9)** (E,9,2) (Q,7,6)

- void **f3()** – Delete the node holding the heaviest **Laptop** (maximum weight). If there are more than one node satisfying the requirement, delete the last of them. Output in the file **f3.txt** must be the following:

(B,**9**,2) (D,2,6) ~~(E,9,4)~~ (Q,4,5) (R,3,7)

(B,9,2) (D,2,6) (Q,4,5) (R,3,7)

- void **f4()** – How many **Laptops** are there in the list?
Hint: you should use **f.writeBytes(...)** to write the result to the output file.
The output in the **f4.txt** file should be as follows:

(H,1,3) (I,3,7) (J,4,5) (K,5,6) (L,6,8)

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- void **f5()** – Delete the first node, then swap the first and the last node. The content of the output file **f5.txt** must be the following:

~~-(N,6,1)~~ (A,9,3) (S,7,5) (D,3,9)

(D,3,9) (S,7,5) (A,9,3)