Q1:
Each one stores multiple items as well as can edit stored items and use linear storage.

They both store multiple items, use linear storage, and can edit and change the items that are stored.

Q3:
The output generated by the statements in this scenario is shown below

output:
8, 13
8, 12

Q4:
This problem works 1:1 with how a stack works by only being able to add items and remove items from the top of the stack or “hot plate.”

The hot plate problem works almost exactly how a stack works. They both can only add new items(plates) to the top of the stack and remove them from the top as well.

Q5:
The output generated in this case is shown below

output:
5, 8
12, 5

Q6:
FIFO removes the first items which were stored and then adds new items at the back. A LIFO removes the newest item added and removes the ability to remove older items unless you go through the whole stack until they are on the top.

A FIFO data structure removes the oldest(first) item being stored and adds new items to the back of the order. A LIFO data structure removes the newest(last) item that is stored and the oldest items are only accessed by removing items that are on top of them.

Q7:

Arriving and leaving a drive through and an operating system processing inputs and outputs as they line up sequentially.