

Advanced Algorithms and Data Structures:

1.

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

3.

8 13

8 12

4.

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.

5.

5 8

12 5

6.

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.

7.

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