Assignment Six

Abstract Data Types
CS2263, SUMMER 2020

Outcome

An interactive program that tests Stack and Queue ADT modeules.

Your Tasks

Both portions of this assignment will use the following data structure:

```
typedef struct pt2link {
    Point2D* payload;
    Struct pt2link* next;
}PtLink, *pPtLink
```

Stack

Create a stack ADT module to manage Point2D data. The module should handle stack creation, push, pop, peek, reporting the stack contents and stack destruction. You should use your current Point2D module wherever possible. Test your module by implementing it with the `playStack.c` program.

Queue

Create a queue ADT module to manage Point2D data. The module should handle queue creation, enqueuing, dequeuing, peek (look at the next value to be dequeued), reporting the queue contents and queue destruction. You should use your current Point2D module wherever possible. Test your module by implementing it with the `playQueue.c` program.

Note: Listing the stack/queue contents should include reporting the addresses of the `PtLink`, as well as the addresses of `payload` and `next`.

The Zip File

This should include your report, all of your source files, including the test programs and makefile

Submission

Before the assignment deadline, submit a single zip or tar file (named *LastName_FirstName_A6.zip* or *LastName_FirstName_A6.zip*) containing your source code