

**Lab 10 - In Lab Assignment**

Due end of the lab session

Acknowledge your collaborators or source of solutions, if any. **Submission by the end of the LAB is required.** Please type your answers, handwritten submission will not be accepted. Do all of the following.

1. If X, Y, and Z are inserted into a stack and a queue, what will be the order of removal for the stack? For the queue?
2. Name the functions according to their descriptions.

Function	Description
	A function that allocates storage space for a single data object that is referenced through a pointer.
	A function that allocates storage space for an array of objects.
	A function that returns the storage space of the heap.

3. Assume the following data type definition and declaration:

```
typedef struct node_s {  
    int num;  
    struct node_s *restp;  
} node_t;  
.  
.  
.  
node_t *headp, *cur_nodep;
```

Write a for loop header that causes `cur_nodep` to point in succession to each node of the linked list whose initial pointer is stored in `headp`. The loop should exit when `cur_nodep` reaches the end of the list.