

## Lecture 5.2

### Topics

#### 1. Functions – Continued

---

### 1. Functions – Continued

Let's briefly go over the setup of a function specified as below.

```
// Type Definition
struct IntNode {
    int iData;
    struct IntNode* next;
};

typedef struct IntNode* IntList;
typedef struct IntNode* IntNodePtr;

/* Function Prototype */
int insertFirst(int, IntList*);

/* Function Definition */
/**
 * Function Name: insertFirst(int iOld, IntList* addrOfHead)
 * Description:   Inserting node at the front of linked list
 *
 * Pre/Entry:     iOld : Value to be inserted
 *                addrOfHead : address of head
 *
 * Internals:     The given linked list is updated
 *
 * Post/Exit:     Returns a Boolean value
 */
int insertFirst(int iOld, IntList* addrOfHead) {
    IntNodePtr inPtr;
    int iBool;

    /* Starting the list creation */
    iBool = 1;

    inPtr = createNode(iOld);

    if (inPtr) {
        if (*addrOfHead) { /* Inserting the node to the list */
            inPtr->next = *addrOfHead;
            *addrOfHead = inPtr;
        } else {
            *addrOfHead = inPtr;
        }
    } else {
        iBool = 0;
    }

    return iBool;
}
```