1. (100 pts) Write a program to implement a function to make a copy of a linked list. Assume that node structure of a singly linked list is as follows.

```c
struct node
{
    int info;
    struct node *next;
};
typedef struct node node;
```

Implement the copy function whose prototype is given below

```c
node *CopyLinkedList(node *head)
```

`CopyLinkedList` function makes a copy of a singly linked list that is provided as a parameter and returns a pointer to the new linked list.

Consider the following linked list

```
head ——— 5 ——— 6 ——— 12 ——— Null
```

After the `CopyLinkedList` function is called as shown below

```c
head2 = CopyLinkedList(head);
```

Old linked list and the new copy are as follows

```
head ——— 5 ——— 6 ——— 12 ——— Null
```
```
head2 ——— 5 ——— 6 ——— 12 ——— Null
```

To test your function, start with a linked list and print the list. Make a copy of the linked list using `CopyLinkedList()` function and print the new list. Compare the values printed. They should have the same set of numbers listed in the same order.

Submit your program electronically using the blackboard system

The program you submit should be your own work. Cheating will be reported to office of academic integrity. Both the copier and copiee will be held responsible.