

C201 Review Questions #12

For the given list below and with the type declarations also given, answer the following questions.

```
struct Node
{
    char Ch;
    Node *Link;
};

typedef Node* NodePtr;
```

List



1) Draw a picture of List after each of the functions below is called and returned to main. Each function is independent of the other.

```
void DoSomething1 (NodePtr & List)
{
    List = new(nothrow) Node;
    List->Ch = 'z';
    List->Link = NULL;
}
```

```
void DoSomething2 (NodePtr List)
{
    NodePtr Searcher = List;
    while (Searcher->Link != NULL)
        Searcher = Searcher->Link;

    Searcher->Link = List;
}
```

2) What would be the effect of changing List to a value parameter in DoSomething1?

3) What would be the effect of changing List to a reference parameter in DoSomething2?