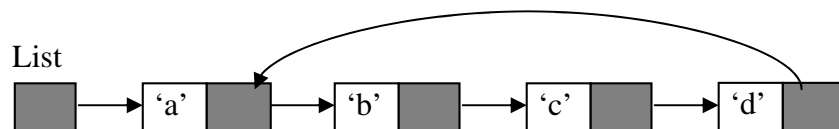# C201 Review Questions #13

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 != List)
      Searcher = Searcher->Link;

  Searcher->Link = NULL;
}
```

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?