

COSC 501

Lab 12

Program: Linked List

The following program creates a linked list with three colors:

```
8      struct Node {
9          string data;
10         Node *next;
11     };
12     typedef Node* NodePtr;
13     void printList(NodePtr head);
14
15     int main() {
16         NodePtr pList, pn;
17
18         pList = new Node;
19         pList->data = "green";
20
21         pn = new Node;
22         pn->data = "blue";
23         pList->next = pn;
24
25         pn->next = new Node;
26         pn = pn->next;
27         pn->data = "violet";
28         pn->next = nullptr;
29
30         printList(pList);
31         return (0);
32     }
```

Add code to the main function that:

- Outputs in order all colors in the list.
- Inserts the color "indigo" in the list after "blue" then outputs the modified list.
- Deletes the node with "violet" then outputs the modified list.
- Deletes all nodes in the list.