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#include <iostream>
#include <stack>
using namespace std;
struct TreeNode {
  char data:
  TreeNode* left;
  TreeNode* right;
};
TreeNode* newNode(char data) {
  TreeNode* node = new TreeNode;
  node->data = data;
  node->left = node->right = NULL;
  return node:
}
TreeNode* constructExpressionTree(string prefix) {
  stack<TreeNode*> s;
  for (int i = prefix.length() - 1; i \ge 0; i--) {
     char c = prefix[i];
     if (isdigit(c) || isalpha(c)) {
       TreeNode* node = newNode(c);
       s.push(node);
    } else {
       TreeNode* node = newNode(c);
       node->left = s.top();
       s.pop();
       node->right = s.top();
       s.pop();
       s.push(node);
    }
  return s.top();
}
void postorderTraversal(TreeNode* root) {
  stack<TreeNode*> s:
  TreeNode* lastNodeVisited = NULL;
  while (!s.empty() || root != NULL) {
     if (root != NULL) {
       s.push(root);
       root = root->left;
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} else {
       TreeNode* peekNode = s.top();
       if (peekNode->right != NULL && lastNodeVisited != peekNode->right) {
          root = peekNode->right;
       } else {
          cout << peekNode->data << " ";
          lastNodeVisited = peekNode;
          s.pop();
     }
  }
void deleteTree(TreeNode* root) {
  if (root == NULL) return;
  deleteTree(root->left);
  deleteTree(root->right);
  delete root:
}
int main() {
  int choice;
  string prefix;
  TreeNode* root = NULL;
  do {
     cout << "Menu" << endl;
     cout << "1. Enter prefix expression" << endl;
     cout << "2. Postorder traversal" << endl;
     cout << "3. Delete tree" << endl;
     cout << "4. Exit" << endl;
     cout << "Enter your choice: ";
     cin >> choice;
     switch (choice) {
       case 1:
          cout << "Enter prefix expression: ";</pre>
          cin.ignore();
          getline(cin, prefix);
          root = constructExpressionTree(prefix);
          break;
       case 2:
          if (root == NULL)
             cout << "Tree not constructed yet" << endl;
```

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else {
             cout << "Postorder traversal of expression tree: ";</pre>
             postorderTraversal(root);
             cout << endl;
          }
           break;
        case 3:
           if (root == NULL)
             cout << "Tree not constructed yet" << endl;</pre>
          else {
             deleteTree(root);
             root = NULL;
             cout << "Tree deleted" << endl;</pre>
          }
           break;
        case 4:
          cout << "Exiting program" << endl;</pre>
           break;
        default:
           cout << "Invalid choice" << endl;</pre>
           break;
     cout << endl;
  } while (choice != 4);
  return 0;
}
```