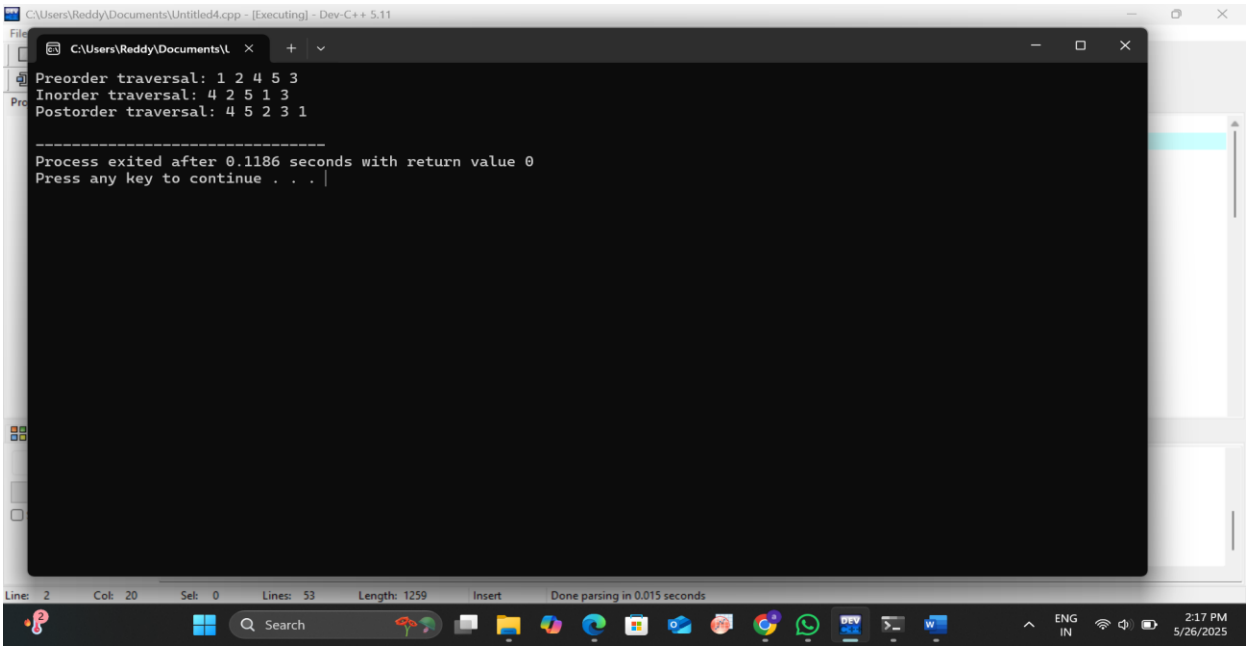
Experiment 14

Sample code:

```
#include <stdio.h>
#include <stdlib.h>
struct Node {
   int data;
   struct Node* left;
   struct Node* right;
};
struct Node* createNode(int value) {
   struct Node* newNode = (struct Node*)malloc(sizeof(struct Node));
   newNode->data = value;
   newNode->left = newNode->right = NULL;
   return newNode;
}
void preorder(struct Node* root) {
   if (root == NULL) return;
   printf("%d ", root->data);
   preorder(root->left);
   preorder(root->right);
}
void inorder(struct Node* root) {
   if (root == NULL) return;
   inorder(root->left);
   printf("%d ", root->data);
   inorder(root->right);
}
void postorder(struct Node* root) {
   if (root == NULL) return;
```

```
    postorder(root->left);
    postorder(root->right);
    printf("%d ", root->data);
}
int main() {
    struct Node* root = createNode(1);
    root->left = createNode(2);
    root->right = createNode(3);
    root->left->left = createNode(4);
    root->left->right = createNode(5);
    printf("Preorder traversal: ");
    preorder(root);
    printf("\n");
    printf("Inorder traversal: ");
    inorder(root);
    printf("\n");
    printf("Postorder traversal: ");
    postorder(root);
    printf("\n");
    return 0;
}
```


C:\Users\Reddy\Documents\Untitled4.cpp - [Executing] - Dev-C++ 5.11
C:\Users\Reddy\Documents\L
Preorder traversal: 1 2 4 5 3
Inorder traversal: 4 2 5 1 3
Postorder traversal: 4 5 2 3 1

Process exited after 0.1186 seconds with return value 0
Press any key to continue . . .
Line: 2 Col: 20 Sel: 0 Lines: 53 Length: 1259 Insert Done parsing in 0.015 seconds
Search
ENG
IN
2:17 PM
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