3.

int MaxPathSum(TreeNode\* root) {

        int maxi = INT\_MIN;

        dfs(root, maxi);

        return maxi;

    }

    int dfs(TreeNode\* root, int& maxi) {

        if (root == nullptr) return 0;

        int left = max(dfs(root->left, maxi), 0);

        int right = max(dfs(root->right, maxi), 0);

        int total = root->val + left + right;

        maxi = max(total, maxi);

        return root->val + max(left, right);

    }

A screenshot of a test results

Description automatically generated