Two Pointer Algorithm Template

C++ Code Implementation:

```
#include <iostream>
#include <vector>

using namespace std;

void twoPointer(vector<int>& nums, int target) {
    int i = 0, j = nums.size() - 1;  // i -> left pointer, j -> right pointer

    while (i < j) {
        int sum = nums[i] + nums[j];

        if (sum == target) {
            cout << "Pair found: (" << nums[i] << ", " << nums[j] << ")" << endl;
            return;
        }
        else if (sum < target) {
            i++;  // Move left pointer to increase sum
        }
        else {
            j--;  // Move right pointer to decrease sum
        }
    }

    cout << "No pair found" << endl;
}

int main() {
    vector<int> nums = {1, 2, 3, 5, 6, 8, 9};
    int target = 10;
    twoPointer(nums, target);
    return 0;
}
```

Time Complexity:

- Best Case: O(1) (Pair found early)
- Average Case: O(N)
- Worst Case: O(N) (Iterates through the array)