

Pair with Given Sum in C++																							
<pre>#include <iostream> #include <vector> using namespace std; bool pairWithGivenSum(const vector<int>& arr, int x) { int left = 0, right = arr.size() - 1; while (left < right) { if (arr[left] + arr[right] == x) { return true; } else if (arr[left] + arr[right] > x) { right--; } else { left++; } } return false; } int main() { vector<int> arr = {10, 7, 8, 20, 12}; int x = 32; cout << std::boolalpha << pairWithGivenSum(arr, x) << endl; return 0; }</pre>	<h3>Dry Run After Sorting</h3> <p>Sorted array: {7, 8, 10, 12, 20} Target x = 32</p> <table><tr><th>left (val)</th><th>right (val)</th><th>Sum</th><th>Action</th></tr><tr><td>7</td><td>20</td><td>27</td><td>Increase left</td></tr><tr><td>8</td><td>20</td><td>28</td><td>Increase left</td></tr><tr><td>10</td><td>20</td><td>30</td><td>Increase left</td></tr><tr><td>12</td><td>20</td><td>32</td><td>🎯 Match → return true</td></tr></table>			left (val)	right (val)	Sum	Action	7	20	27	Increase left	8	20	28	Increase left	10	20	30	Increase left	12	20	32	🎯 Match → return true
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<h3>✔ Output:</h3> <p>true</p>																							