Problem Link:

<https://leetcode.com/problems/number-of-subsequences-that-satisfy-the-given-sum-condition/?envType=daily-question&envId=2025-06-29>

Solution:

class Solution {

public:

int numSubseq(vector<int>& nums, int target) {

const int m = 1e9 + 7;

int n = nums.size();

sort(nums.begin(), nums.end());

vector<int> p(n + 1, 1);

for(int i = 1; i <= n; ++i)

{

p[i] = (p[i - 1] \* 2) % m;

}

int s = 0;

int l = 0, r = n - 1;

while(l <= r)

{

if(nums[l] + nums[r] <= target)

{

s = (s + p[r - l]) % m;

++l;

}

else

{

--r;

}

}

return s;

}

};