Given an array nums of *n* integers and an integer target, are there elements *a*, *b*, *c*, and *d* in nums such that *a* + *b* + *c* + *d* = target? Find all unique quadruplets in the array which gives the sum of target.

**Note:**

The solution set must not contain duplicate quadruplets.

**Example:**

Given array nums = [1, 0, -1, 0, -2, 2], and target = 0.

A solution set is:

[

[-1, 0, 0, 1],

[-2, -1, 1, 2],

[-2, 0, 0, 2]

]