

## OLAP Operation Types ☆

Points: 86 Rank: 8378

Problem

Submissions

Consider a fact table DataPoints(D1,D2,D3,x), and the following three queries:

Q1: `Select D1,D2,D3,Sum(x) From DataPoints Group By D1,D2,D3`

Q2: `Select D1,D2,D3,Sum(x) From DataPoints Group By D1,D2,D3 WITH CUBE`

Q3: `Select D1,D2,D3,Sum(x) From DataPoints Group By D1,D2,D3 WITH ROLLUP`

Suppose attributes D1, D2, and D3 have  $n_1$ ,  $n_2$ , and  $n_3$  different values respectively, and assume that each possible combination of values appears at least once in the table DataPoints. The number of tuples in the result of each of the three queries above can be specified as an arithmetic formula involving  $n_1$ ,  $n_2$ , and  $n_3$ . Pick the one tuple  $(a,b,c,d,e,f)$  in the list below such that when  $n_1=a$ ,  $n_2=b$ , and  $n_3=c$ , then the result sizes of queries Q1, Q2, and Q3 are  $d$ ,  $e$ , and  $f$  respectively.

☐ (2, 2, 2, 6, 18, 8)☐ (2, 2, 2, 8, 64, 15)☐ (5, 10, 10, 500, 1000, 550)☒ (4, 7, 3, 84, 160, 117) ✓

You have 2 attempts left.

[< The Total View \(Previous\)](#)