0

1

10

15

5

2

10

30

5

4

12

5

20

3

5

We have 6 cities in a rural area. It has been estimated that for the population of all 6 cities, building 1 hospital is sufficient and cost-effective. As part of the city planning division, you are tasked to decide which city we must build the hospital in. You must place the hospital such that the ambulances in the hospital can attend to each city in the shortest time. The weighted undirected graph provided in the above figure has cities as nodes and edges as the average time taken from each city to another city (where possible; not all cities have roads between them).