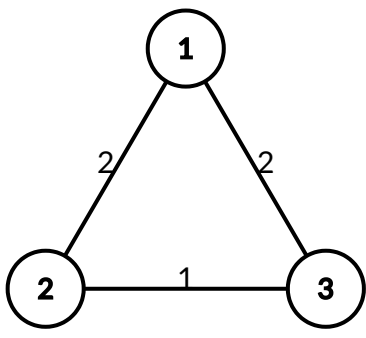
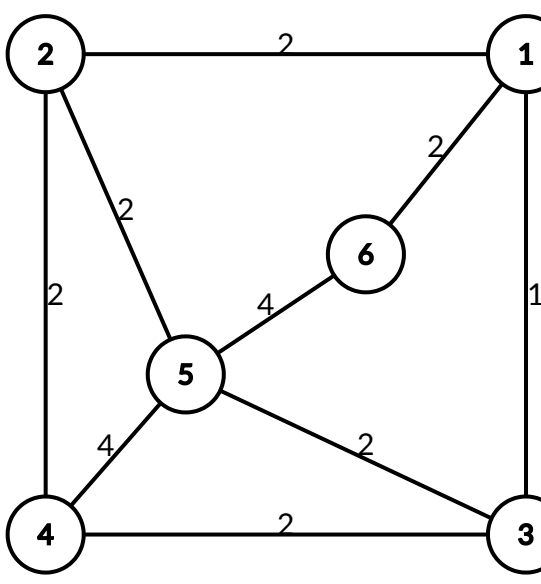


Constraints and notes

- $1 \leq N \leq 10^5$
- $1 \leq M \leq 2 * 10^5$
- The cost of conversion c_s for each street s : $1 \leq c_s \leq 10^4$
- There is at most one road connecting two warehouses
- It is guaranteed at least one conversion plan exists

Input	Output	Explanation
<div>3 3 1 2 2 3 1 2 2 3 1</div>	<div>1</div>	<div><p>There are 2 possible minimum cost conversion plans: (1, 3), (2, 3) or (1, 2), (2, 3). Only the street (2, 3) occurs in both of them.</p></div>

<div>6 9 1 2 2 1 3 1 1 6 2 2 4 2 2 5 2 4 3 2 3 5 2 4 5 4 5 6 4</div>	<div>2</div>	<div><p>Only the roads (1, 3) and (1, 6) are part of all possible conversion plans.</p></div>
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