

**ALGORITHMS AND COMPLEXITY HIT220**

**Assignment 3.2**

**Submitted by:**

**GROUP 46**

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# Assumptions

1. Node number 1 is the destination node where all water flows towards:
   1. Reason for assumption: Node 1 is placed in the Timor Sea which is the largest notable near-by body of water.
   2. Rivers in-land are typically at a higher elevation than sea-level and flow toward a lower elevation.
2. The river can be represented with a directed tree; all nodes are connected by exactly one path.
   1. This assumption holds true for our map.
3. The range x and y coordinates can only be between the value of 0 to 650, inclusively.
   1. This assumption holds true in accordance to the provided map.
4. Dam