INTEGRATIVE TASK 2: FISHING NOW

Icesi Games has tasked **TemuDev** with developing an interactive fishing game featuring two distinct maps: one for water fishing and one for lava fishing. Players will explore these maps, find fishing spots, and plan the best strategies to catch fish while managing their energy efficiently.

Game Conditions:

1. **Fishing in Water and Lava**

   The game will feature two fishing modes: water fishing and lava fishing. Players will navigate through a map representing fishing points, designed as interconnected locations. In water mode, players can move freely between points. In lava mode, moving between points will consume energy, reflecting the difficulty of the journey.

2. **Game Map**

   The game map should have at least 50 locations and 50 connections between them. It should be designed in two different ways to make it more flexible and efficient.

3. **Routes and Paths**:
   Players must be able to calculate routes to move between fishing points and find the best paths based on the map's conditions. In lava mode, the system must include logic to identify accessible routes from the player's current position and determine the most efficient paths between all points.

4. **Game Objectives:** Players must explore the map, catch fish, and efficiently manage their resources and energy to win the game by catching the fish.

5. **Graphic interface:**

   An interactive graphical interface must be developed to allow the player to:

- View the fishing map as a connected graph
- Control the player's movement between points
- Identify optimal routes

Game Restrictions:

- Use Java and JavaFX as main tools.
- The use of libraries such as OpenGL or graphics engines is not allowed.
- The design must be graph-based and meet generic specifications.