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# Calculation of Public Transport Routes

## Introduction

- **Purpose and scope**: finding public transport routes between stations based on predefined schedules and stops.

## Overview of the Problem

- **Definition:** Identifying routes, departure, and arrival times between different stations.

- **Complexity**: Multiple transport lines, intervals, and schedules.

## Implementation Choices

### a. **Predicate Definitions**

- `**ligne/5**`: Describes transport lines, stops, intervals, and schedules.

- `**addh/3**`: Adds minutes to a time representation.

- `**lig/3`, `ligtard/4`, `ligtot/4`:** Functions to verify and calculate departure times between stops.

### b. **Route Finding Logic**

- `**ligtard/4`:** calculates the latest departure time between stops.

- `**ligtot/4`:** calculates the earliest departure time between stops.

- `**itinTot/4` and `itinTard/4`:** Recursive predicates for generating routes.

### c. **User Interface**

**interfaceUtilisateur/0` predicate** :

- Displays available stations and prompts user input for departure and arrival stations.

- Implements placeholder logic to find and display routes based on user input.

## Conclusion

This structure provides a comprehensive overview of the project's implementation, including predicate definitions, route-finding logic, and user-interface.