

1 Task 1

1.1 Task A

1.2 Task B

2 Task 2

Categorize the following relationships into **generalization**, **aggregation**, or **association**. Draw an appropriate **class diagram**. There could be more than one solution if applicable.

2.1 A dining philosopher is using a fork.

Dining philosopher is using **exactly** one fork and one fork is used **exactly** by one philosopher.

This is **association**, this is not aggregation as fork is not a part of philosopher, neither philosopher part of fork, and this is not generalization as philosopher is not a kind of fork and fork is not a kind of philosopher.

2.2 A file is an ordinary file or a directory file.

2.3 Files contain records.

2.4 A polygon is composed of an ordered set of points.

2.5 A person uses a computer language on a project.

2.6 A route connects two cities

2.7 Modems and keyboards are input/output devices.