

Comp 150 — Worksheet 05



2007-2008 Spring Term

1 Checklist for Objectives and Outcomes

- Be able to accumulate knowledge for structural recursion.

Make sure that you are content with all of the items above!!

2 Project 04

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Deadline is 09:00 Saturday 12, April. You should submit your project to the course automation system. However, it will NOT be evaluated and graded unless you attend your class and demonstrate it to your assistant

Record all your interactions.

Before doing anything else, input the following lines into the upper window, replacing `your-name` and `your-student-number` with your real name and student number:

```
"your-name"  
(random your-student-number)
```

!

Data definitions, Statement of Purpose, Examples and Tests, Statement of Termination Arguments when necessary, and Templates are all important! That is, before you write any program, you should first design it. Please note that, any code which fails to present a working *contract* and *template* will be ignored by your assistant, anytime. See the Book for elaborated design recipe

2.1 Part 1

Design and implement a program that consumes a graph, an origin and a destination and produces the route from the origin to the destination, if any, using accumulator style programming.

The graph should contain the distances between each neighbour, too.

2.2 Part 2

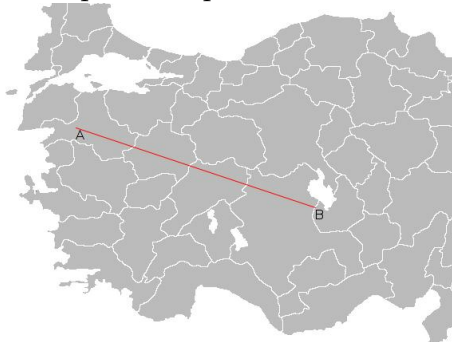
Using the same approach, calculate the distance between two nodes.

2.3 Part 3

Visualize your output using the `image.ss` on a Turkish map. You need not all the cities in the graph, but 5-6 is enough. Use GIMP and the “Turkey” map provided on Wikipedia to provide a realistic example.

Hints: (1) The mouse position on The GIMP on a particular position gives the pixel coordinate of that position. (2) Use the “Turkey” map instead of a plain empty-screen command. These will give you beautiful results.

A simple example is as follows:



3 Reading Assignment

Read Sections 32 of “How To Design Programs” for this week before you come to lecture and do exercises soon after the lecture.