Exploring Computation with Relational Programming

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For my H211 students:
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Learning with always trumps learning from.

—Woodie Flowers

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Preface

> *I think the weakest way to solve a problem is just to solve it; that's what they teach in elementary school. In some math and science courses they often teach you it's better to change the problem. I think it's much better to change the context in which the problem is being stated. Some years ago, Marvin Minsky said, "You don't understand something until you understand it more than one way." I think that what we're going to have to learn is the notion that we have to have multiple points of view.*
>
> —Alan C. Kay[1]

Alan J. Perlis said, "A language that doesn't affect the way you think about programming, is not worth knowing."[2] The point of view we shall adopt in this book is, "A program that doesn't run backwards is not worth writing."

[1] From Kay's Stanford Computer Forum talk, *Predicting the Future* (Kay 1989). Also at http://www.ecotopia.com/webpress/futures.htm.

[2] Epigram 19 from "Epigrams on Programming" (Perlis 1982). Also at http://www.cs.yale.edu/quotes.html.

Chapter 1

Introduction

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