2.1: Prologue

Learning a new programming language seems always to proceed in two stages. In the first stage, everything is unfamiliar. You're learning the basic details of language syntax, typing different things and wondering whether they'll compile, figuring out how to express simple concepts in this clumsy new system of strange terminology and odd-looking punctuation. Nobody enjoys this first stage, because nobody likes to feel awkward. If you've ever taken lessons on a musical instrument, learned a foreign language, or taken up jogging or skiing for exercise, you're familiar with this phase. Early in the learning process, you need to concentrate hard on the details, and you're never sure if you're doing the right thing. It's because of this awkward stage that many endeavors of this sort fail.

But if you persevere, you eventually reach the second stage, which is hugely rewarding. In this stage, the basic skills (reading sheet music, stopping and turning on skis, conjugating your verbs) have become automatic. You no longer have to think about them. Then you can concentrate on the good stuff: expressing emotion via a beautiful tone from your violin; watching the scenery or racing downhill; discussing the nose of a Bordeaux in a cafe on the Champs Elysees; writing solid, dependable code that you can be proud of.

This course note is intended to get you through the awkward first stage as quickly and painlessly as possible, so you can be playing a symphony before you know it.