DAY 8

Applications: Finance

Where are We?

In class on Day 7, we had enough time to go through Dot Products and Simultaneous Equations. If you need to read more about those applications, do that. If not, for Day 8, you can start plowing into the finance chapter.

Finance

Most of us will (unfortunately) have to take out a loan at some point in our lives. If you are financially well-off, perhaps you will get to collect interest on a loan that you make to someone else. Either way, it is important to know how loan balances are calculated. On pp. 32–33 the *Applications Programs* book describes the standard way to do the calculation. Read those two pages carefully.

History — Basics

We have pp. 264-282 from *Bill & Dave* to read. Your previous reading covered the development of the HP-9100A released in 1968. This reading covers the development of the HP-35, released in 1972. We are trying to understand the origin of the HP-25 released in 1975 (or the HP-25C, released in 1976). There is a critical stepping stone between the HP-35 and the HP-25. It is the HP-65 released in 1974. So that this doesn't just become a blur of product releases, try to keep in mind what differentiated the HP-9100A, the HP-35, the HP-65, and the HP-25 from each other. It is somewhat analogous to the generations of the iPod and iPhone (the iPod, the iPhone, the iPhone 3G, and the iPhone 3GS, introduced 2001, 2007, 2008, and 2009 respectively).

History — Big Questions

The reading closes by saying that HP now outsells Apple, and therefore HP missing the boat on the Apple computer that the Woz designed while he was working for them is not that big a deal. However, the book was written in 2007, when Apple was still struggling and the first iPhone was just about to come out. Today, the market capitalization of Apple is \$2.5 trillion and HP is \$26 billion. In other words, Apple is almost 100x times as valuable a company as HP, and HP is now a truly sad shadow of its former self. The Carly Fiorina era at HP was the last straw, just as the John Sculley, Michael Spindler, and Gil Amelio eras at Apple almost finished Apple off.

My questions for you are why do all big companies decline (severely) a few decades (or at most a century) after their founding? Are there counter-examples? Most importantly is there evidence of the problems emerging at HP in this reading? If you have a different and better opening question to discuss in the wake of the reading, feel free to bring it.

Looking Ahead

Your next problem set will involve dot products, simultaneous equations, and finance applications and will be in the Day 9 handout. There is only reading for Day 8.

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