Outline for April 13, 2007

Question: This is a class in using computers, so one would expect that students would submit all work electronically. Yet you are required to print your term paper work and submit the hard copy. The reason for this is to improve your proficiency using a computer-based word processor to produce a pleasing-looking paper. Is this a useful goal for the class? Why or why not?

1. Greetings and felicitations!
   a. Remember, lab exercise 2 is due today at 11:55PM

2. Tape
   a. Most popular now: QIC (quarter-inch cartridge) tapes
   b. Tape contains 20–32 tracks; bits written sequentially on a track, in blocks of 512 or 1024 blocks; checksum at end of block
   c. Holes in tape near end; tape reverses, head moves up or down to next track
   d. Older tapes: 9-track reel-to-reel, bytes written across tracks

3. Terms
   a. “Cache”: Used to store data that was used for quicker access if it is needed again
   b. “Prefetching”: bring data into cache before it is used, in anticipation of it being used
   c. “GIGO”: Garbage In, Garbage Out; what you get out of a computer is no more accurate than the data you put in
   d. “nanosecond”: $10^{-9}$ seconds; light (and electricity) goes 11.8 inches in this time

4. Keyboard and mouse
   a. QWERTY keyboard, Dvorak keyboard
   b. Ergonomic keyboards
   c. One-button mouse, three-button mouse

5. Analog and digital
Keyboards

These are from Wikipedia.

Dvorak Keyboard

```
~  !  @  #  $  %  ^  &  *  (  )  {  }  Backspace
1  2  3  4  5  6  7  8  9  0  [  ]
Tab  "  <  >  P  Y  F  G  C  R  L
Caps Lock  A  O  E  U  I  D  H  T  N  S
Shift  Q  J  K  X  B  M  W  V  Z
Ctrl  Win Key  Alt
```

QWERTY Keyboard

![QWERTY Keyboard Diagram]