**Composition: Electronic Media II**
**March 5, 2008**
The key object in Max/MSP

1. ASCII is an acronym for "American Standard Code for Information Interchange."

2. Wikipedia has this to say:
    a. "Work on ASCII began in 1960. The first edition of the standard was published in 1963,[2] a major revision in 1967, and the most recent update in 1986. It currently defines codes for 128 characters: 33 are non-printing, mostly obsolete control characters that affect how text is processed, and 94 are printable characters (excluding the space).
    b. On March 11, 1968, U.S. President Lyndon B. Johnson mandated that all computers purchased by the United States federal government support ASCII, stating: "All computers and related equipment configurations brought into the Federal Government inventory on and after July 1, 1969, must have the capability to use the Standard Code for Information Interchange and the formats prescribed by the magnetic tape and paper tape standards when these media are used."

3. Max/MSP has several objects that utilize ascii, like the **key** object below:
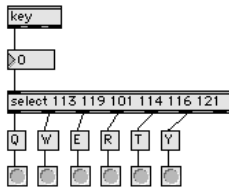
    a. When the user types the letter Q, the number box beneath the **key** object will show "113" (the ascii number assigned to the letter Q).
    b. The number is sent to the **select** object, where it is the first number listed.
    c. A bang is sent out the leftmost outlet and triggers the bang button.
    d. Similar actions occur with W, E, R, T, Y.

4. Consider the patch below.
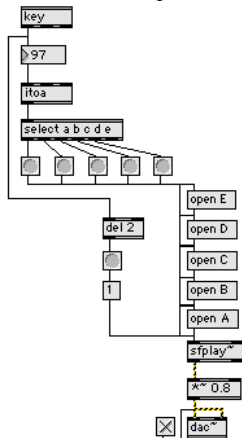
    a. The letter "a" typed by the user is sent as ascii number 97 to the number box beneath the **key** object.
    b. This number is sent to the **itoa** object. Itoa is an acronym for "integer to ascii". This object converts the ascii number 97 back to the letter a.
    c. The letter a is sent to the **select** object, where it is the first item on the left.
    d. A bang is sent to the leftmost outlet.
    e. The bang is patch to the message box "open A", which opens the soundfile "A" residing in the same folder as the patch.
    f. At the top of the patch, the letter a also sends out a bang which travels down to the **del** object.
    g. This delays the bang from 2 milliseconds before triggering **sfplay~**. The reason for this delay is to make sure the soundfile "A" is open before **sfplay~** is triggered.