An ASCII Chart

ASCII is the name of a standard for representing western keyboard characters as integers. It is important to understand that characters are made to correspond to integers, and it is a separate question what "base" is used to represent those integers. The codes from 0 to 31 are used to represent non-printable characters. Such codes will not be needed for this course. Thus, the relevant values for this course begin with 32 (for a blank space) and end with 126 (for the character "").

In this course integers are normally represented in base 10.

Nonetheless it may be instructive to present a simple chart for the values from 32 to 126 in base 16. For this a character is represented by two hexadecimal (base 16) digits. The row index is the first hex digit, the column index the second.

0123456789ABCDEF

```
2 !"#$%&'()*+,-./
3 0123456789:;<=>?
4 @ABCDEFGHIJKLMNO
5 PQRSTUVWXYZ[\]^_
6 'abcdefghijklmno
7 pqrstuvwxyz{|}~
```

In the foregoing chart the spot at hex location 20 represents a blank space, while the spot at hex location 7F should be ignored for the purposes of this course.

A table using standard base 10 integer notation follows:

```
0 1 2 3 4 5 6 7 8 9
           ! " # $ % & '
3
      ()*+,-./01
4
5
      2 3 4 5 6 7 8 9 : ;
6
      < = > ? @ A B C D E
7
      FGHIJKLMNO
      PQRSTUVWXY
8
9
      Z[\]^_'abc
10
      defghijklm
11
      nopqrstuvw
12
      x y z { | }
```

In the foregoing chart the spot at location 32 represents a blank space, while the spots at locations 30, 31, 127, 128, and 129 should be ignored.