Pronounced as-key, ASCII is a sequential formula for representing English characters as numbers, with each letter assigned a number from 0 to 127; however, not all of those are really printable characters. An acronym for American Standard Code for Information Interchange, this is the most common code for text on computers. In common usage, ASCII means a text file that doesn't include any formatting. In most programs, the “Save As Text” option will create an ASCII file in contrast to a specially formatted file or binary file. An ASCII file is a character by character save process. For example, the ASCII code for an upper case A is decimal 65; the lower case a adds decimal 32 to that and is 97. Most computers use ASCII codes to represent, display or print text, which makes it possible to transfer data from one computer to another. The meaning of the acronym name in itself is misleading as there really is no standard, just a strong suggestion. Many companies have taken generous, liberal and self-enhancing liberties in making modifications to suit themselves, IBM and Microsoft being at the top of the list.

Text files stored in ASCII format are sometimes called text files or ASCII files; they often have the file extensions .TXT, .txt, .ASC or .asc. Text editors and word processors are usually capable of storing data in ASCII format, although ASCII format is not always the default storage format. Most data files, particularly if they contain numeric data, are not stored in ASCII format unless there is a need for easy and quick interchange with several types of systems that access that data. Executable programs are not normally stored in standard ASCII format, though there are certain exceptions such as executable programs running under interpreters.

The standard ASCII character set uses only 7 bits of the 8 bit byte for each character. There are several larger character sets that use all 8 bits of the byte, which gives them an 128 additional characters in the set. The extra characters are used to represent characters not used in the English language, graphics characters or symbols, and mathematical representations or symbols.

Several companies and organizations have proposed extensions for these 128 characters; none have made any effort to work together for standards. The DOS operating system uses a superset of ASCII called the ASCII extended set or PC ASCII. A more universal standard is the ISO Latin 1 set of characters used by many current operating systems and most current generation browsers. Typical non-conformer IBM (and several other mainframe makers), use another code set called EBCDIC. You can see the ASCII codes and what they do.