Title 1:

Before the early 1960s, computers were mainly used for number-crunching rather than for text, and memory was extremely expensive. Computers often allocated only 6 bits for each character, permitting only 64 characters—assigning codes for A-Z, a-z, and 0-9 would leave only 2 codes: nowhere near enough. Most computers opted not to

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Title 2:

support lower-case letters. Thus, early text projects such as Roberto Busa's Index Thomisticus, the Brown Corpus, and others had to resort to conventions such as keying an asterisk preceding letters actually intended to be upper-case.

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Title 3:

Fred Brooks of IBM argued strongly for going for to 8-bit bytes, because someday people might want to process text; and won. Although IBM used EBCDIC, most text from

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Title 4:

then on came to be encoded in ASCII, using values from 0 to 31 for (non-printing) control characters, and values from 32 to 127 for graphic characters such as letters, digits, and punctuation. Most machines stored characters in 8 bits rather than 7, ignoring the remaining bit or using it as a checksum.

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Title 5:

the near-ubiquity of ASCII was a great help, but failed to address international and linguistic concerns. the dollar-sign ("$") was not so useful in England, and the accented characters used in Spanish, French, German, and many other languages were entirely unavailable in ASCII (not to mention characters used in Greek, Russian, and most Eastern languages). Many individuals, companies, and countries defined extra characters as needed—often reassigning control characters, or using value in the range

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Title 6:

from 128 to 255. Using values above 128 conflicts with using the 8th bit as a checksum, but the checksum usage gradually died out.

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