Coding schemes, also known as character encoding schemes, are methods used to represent characters (letters, numbers, symbols) in digital form. These schemes assign unique codes to each character to facilitate their representation, storage, and transmission in computer systems. Here are some common coding schemes:

1. ASCII (American Standard Code for Information Interchange):
   - ASCII is one of the oldest and most widely used character encoding schemes.
   - It uses 7 bits to represent 128 characters, including uppercase and lowercase letters, digits, punctuation marks, and control characters.
   - ASCII has been extended to include an 8-bit version (Extended ASCII) to support additional characters and language-specific symbols.
2. Unicode:
   - Unicode is a universal character encoding standard that aims to represent every character from every language in the world.
   - It uses a variable-length encoding scheme, with most characters represented by 16 bits (UTF-16 encoding) or 32 bits (UTF-32 encoding).
   - Unicode supports over 143,000 characters, including characters from different scripts, symbols, emojis, and special characters.
   - UTF-8 is a popular Unicode encoding scheme that uses variable-length encoding, with characters represented by 8, 16, or 24 bits depending on their code point.
3. UTF-8 (Unicode Transformation Format-8):
   - UTF-8 is a variable-length encoding scheme for Unicode characters.
   - It uses 8-bit code units to represent characters, with one to four bytes used to encode each character depending on its code point.
   - UTF-8 is backward compatible with ASCII, meaning ASCII characters are represented using a single byte (same as ASCII encoding), while other characters are represented using multiple bytes.
4. UTF-16 (Unicode Transformation Format-16):
   - UTF-16 is another variable-length encoding scheme for Unicode characters.
   - It uses 16-bit code units to represent characters, with one or two 16-bit code units used to encode each character depending on its code point.
   - UTF-16 is commonly used in platforms that require fixed-width encoding, such as Windows operating systems.
5. ISO 8859 (Latin) Encoding:
   - ISO 8859 is a series of character encoding standards developed by the International Organization for Standardization (ISO).
   - Each ISO 8859 standard defines an 8-bit character encoding scheme optimized for specific language groups or regions.

- Examples include ISO 8859-1 (Latin-1) for Western European languages, ISO 8859-5 for Cyrillic scripts, and ISO 8859-7 for Greek.

These are some of the most commonly used coding schemes for representing characters in digital form. The choice of encoding scheme depends on factors such as language requirements, compatibility, and the specific application's needs.