**AES Algorithm:**

* AES is a block cipher with a block length of 128 bits.
* AES allows for three different key lengths: 128, 192, or 256 bits.
* Encryption consists of 10 rounds of processing for 128-bit keys, 12 rounds for 192-bit keys, and 14 rounds for 256-bit keys.
* Except for the last round in each case, all other rounds are identical.
* Each round of processing includes one single-byte based substitution step, a row-wise permutation step, a column-wise mixing step, and the addition of the round key.





