Encryption:

In the AES Encryption, I first put all the supported functions into a single file and arrange the order. Then, I create the function for substitution, shift rows, mix columns, and add round key. Then, in the main encrypted function, I first find the correct round key, create the state array. Then, I xor the state array and the first round key before the loop. Then I create a loop to go through 14 rounds. In the loop we do the operation with the order of substitution, shift rows, mix columns, and add round key. However, we should not mix columns for the last round. Finally, we write our output in hex.

Decryption:

In the AES Decryption, I did similar thing, but only reverse the order of the round key and change the order of the function to inverse shift rows, inverse substitution, add columns, and add round keys. Finally, we write our output in text.

Encryption output:



Decryption output:

As a constructor in Formula One, Ferari has a record 16 Constructors' Championships. Their most recent Constructors' Championships was won in 2008. The Team also holds the record for the most Drivers' Championships with 15, won by nine different drivers: Alberto Ascari, Juan Manuel Fangio, Mike Hawthorn, Phil Hill, John Surtees, Niki Lauda, Jody Scheckter, Michael Sschumacher and Kimi Raikkonen. Raikkonen's title in 2007 is the most recent for the team. The 2020 Tuscan Grand Prix marked Ferrari's 1000th Grand Prix in Formula One.