X versus Y variables interaction

Cholesterol / BP / Drug
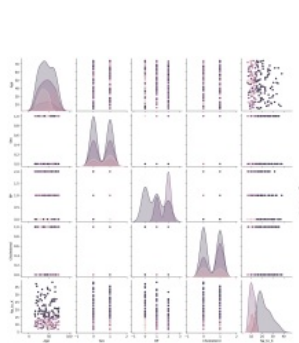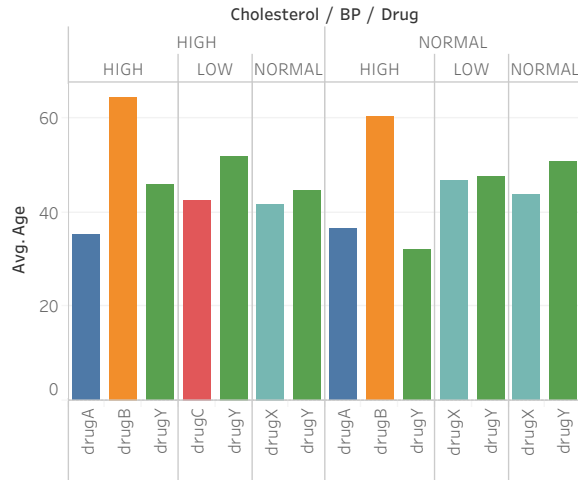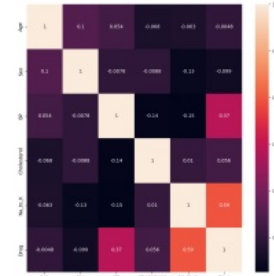
pairplot provides a visual overview of the relationships between all feature pairs, colored by the prescribed drug.


1. Strongest positive correlations:
   a) Age and Blood_Pressure (0.65)
   b) Sodium to Potassium and Drug (0.59)
2. Strongest negative correlation:
   a)Cholesterol and Drug (-0.43)

- Drug Y is the most commonly prescribed, followed by Drug X.
 - Drugs A, B, and C are prescribed less frequently
- Patients prescribed Drug B tend to be older
- Patients with high blood pressure (BP = 2) are more likely to receive Drug C.
 - Drugs A and B are commonly prescribed for low blood pressure (BP = 0).
 - High cholesterol (Cholesterol = 1) is a common factor for patients receiving   Drugs A, B, and C.
 - Patients on Drug Y generally have higher sodium to potassium ratios.

Age vs Na_to_K Ratio
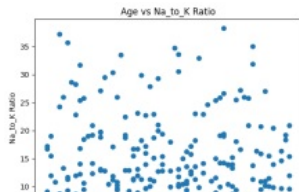
Decision Tree Visualization
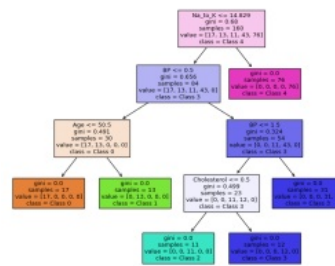
Na_to_K <= 14.83, BP <= 0.50, Age <= 50.50: This path results in class: 0.
Na_to_K <= 14.83, BP <= 0.50, Age > 50.50: This path results in class: 1.
Na_to_K <= 14.83, BP > 0.50, BP <= 1.50, Cholesterol <= 0.50: This path results in class: 2.
Na_to_K <= 14.83, BP > 0.50, BP <= 1.50, Cholesterol > 0.50: This path results in class: 3.
Na_to_K > 14.83: This path results in class: 4