

Report (Diabetes)

Diabetes: is a disease that occurs when your blood glucose, also called blood sugar, is too high. Blood glucose is your main source of energy and comes from the food you eat. Insulin, a hormone made by the pancreas, helps glucose from food get into your cells to be used for energy.

1 - Data:

| | ID | No_Pation | Gender | AGE | Urea | Cr | HbA1c | Chol | TG | HDL | LDL | VLDL | BMI | CLASS |
|-----|-----|-----------|--------|-----|------|-----|-------|------|-----|-----|-----|------|------|-------|
| 0 | 502 | 17975 | F | 50 | 4.7 | 46 | 4.9 | 4.2 | 0.9 | 2.4 | 1.4 | 0.5 | 24.0 | N |
| 1 | 735 | 34221 | M | 26 | 4.5 | 62 | 4.9 | 3.7 | 1.4 | 1.1 | 2.1 | 0.6 | 23.0 | N |
| 2 | 420 | 47975 | F | 50 | 4.7 | 46 | 4.9 | 4.2 | 0.9 | 2.4 | 1.4 | 0.5 | 24.0 | N |
| 3 | 680 | 87656 | F | 50 | 4.7 | 46 | 4.9 | 4.2 | 0.9 | 2.4 | 1.4 | 0.5 | 24.0 | N |
| 4 | 504 | 34223 | M | 33 | 7.1 | 46 | 4.9 | 4.9 | 1.0 | 0.8 | 2.0 | 0.4 | 21.0 | N |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 95 | 171 | 45434 | M | 40 | 22.0 | 159 | 5.4 | 3.1 | 1.6 | 1.1 | 1.3 | 0.7 | 24.0 | N |
| 96 | 180 | 454316 | F | 54 | 6.3 | 106 | 5.6 | 4.3 | 2.0 | 1.3 | 2.2 | 0.9 | 20.0 | N |
| 97 | 181 | 454316 | F | 50 | 3.3 | 70 | 4.9 | 3.7 | 0.9 | 1.2 | 2.7 | 0.6 | 24.0 | N |
| 98 | 182 | 454316 | M | 60 | 7.5 | 70 | 0.9 | 3.4 | 5.3 | 1.1 | 3.6 | 0.8 | 24.0 | N |
| 99 | 186 | 454316 | M | 77 | 5.0 | 106 | 5.4 | 0.0 | 2.8 | 0.8 | 1.8 | 0.7 | 19.0 | N |

These are the data I was analyzed it.

- Gender:
M: male.
F: Female.
- Class:
N: NO (Not have diabetes)
P: prediabetes
Y: Yes (have diabetes)

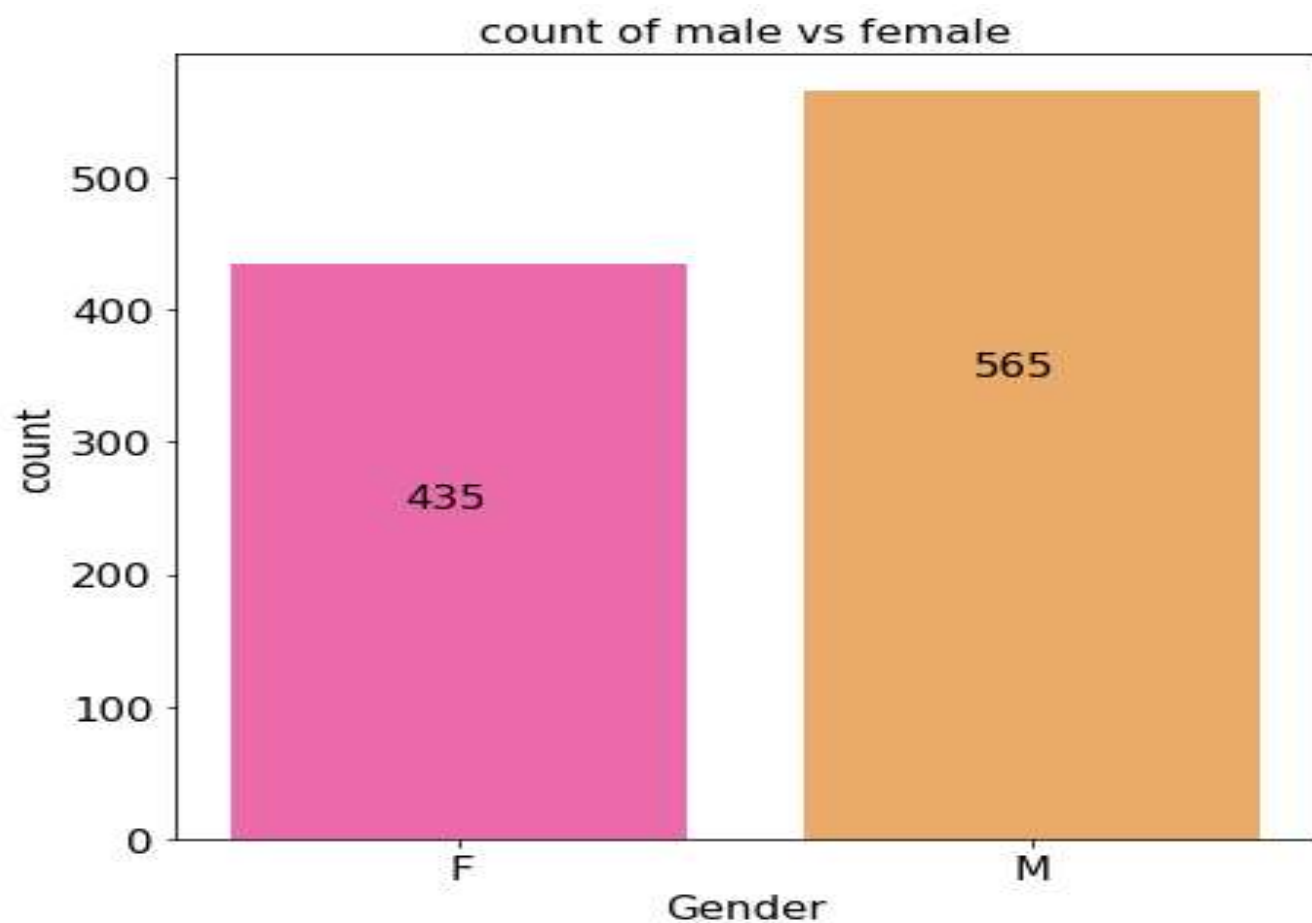
business plan:

Q1: what is the percentage of male and female in this data? and the percentage of disease?

Q2: What is the range of age the disease is common?

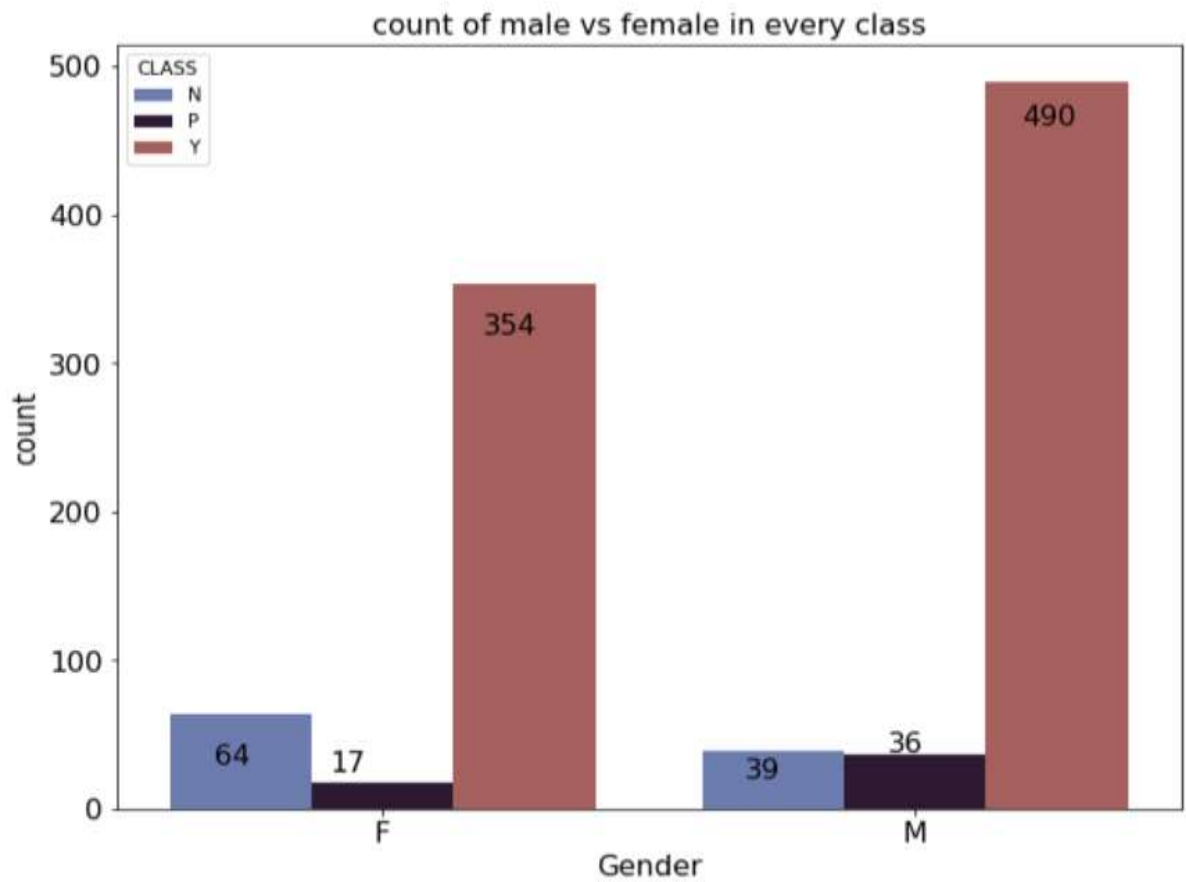
Q3 : what is the features are related with the class ? and how we can classification the disease?

Q1: what is the percentage of male and female in this data? and the percentage of disease?



The count of males =565, and females= 435, the total is 1000.

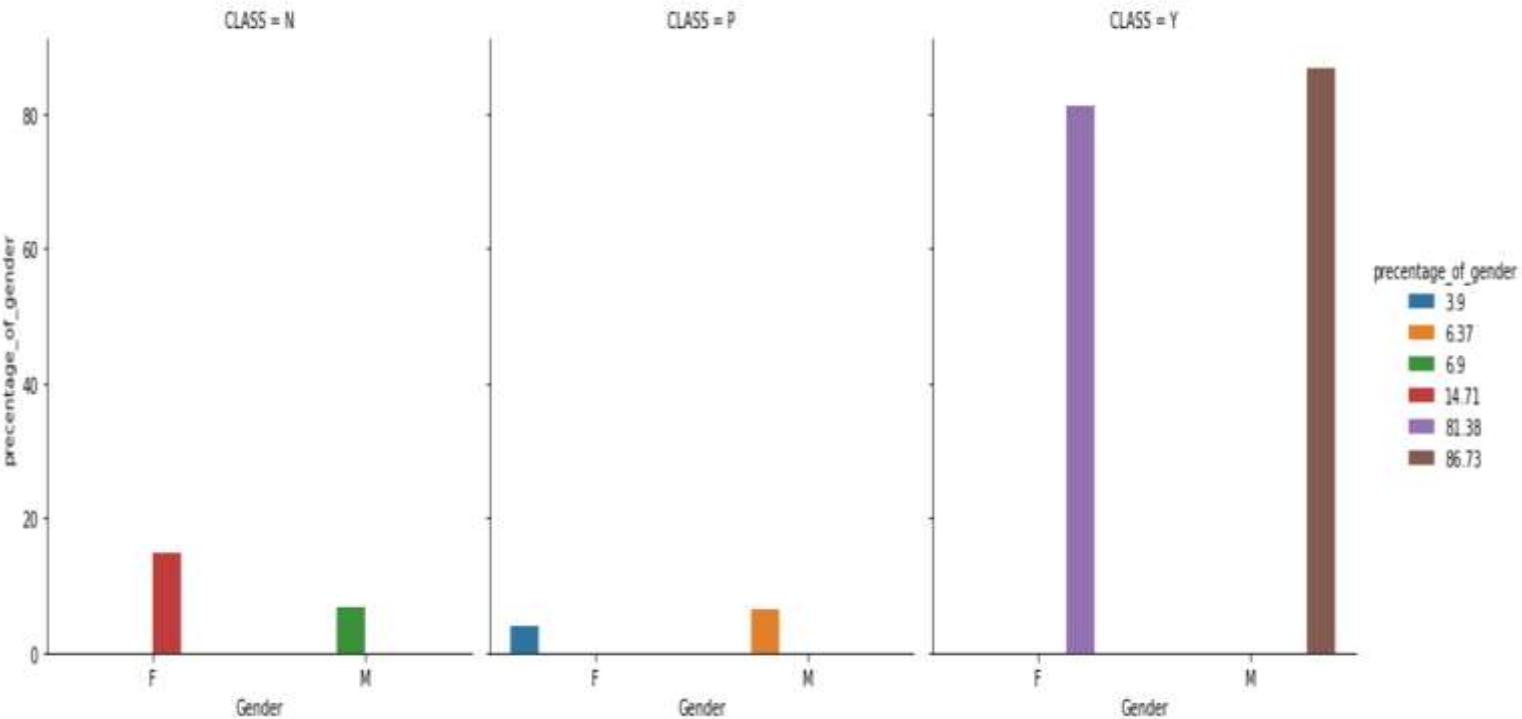
It is mean the count of males is larger than females.



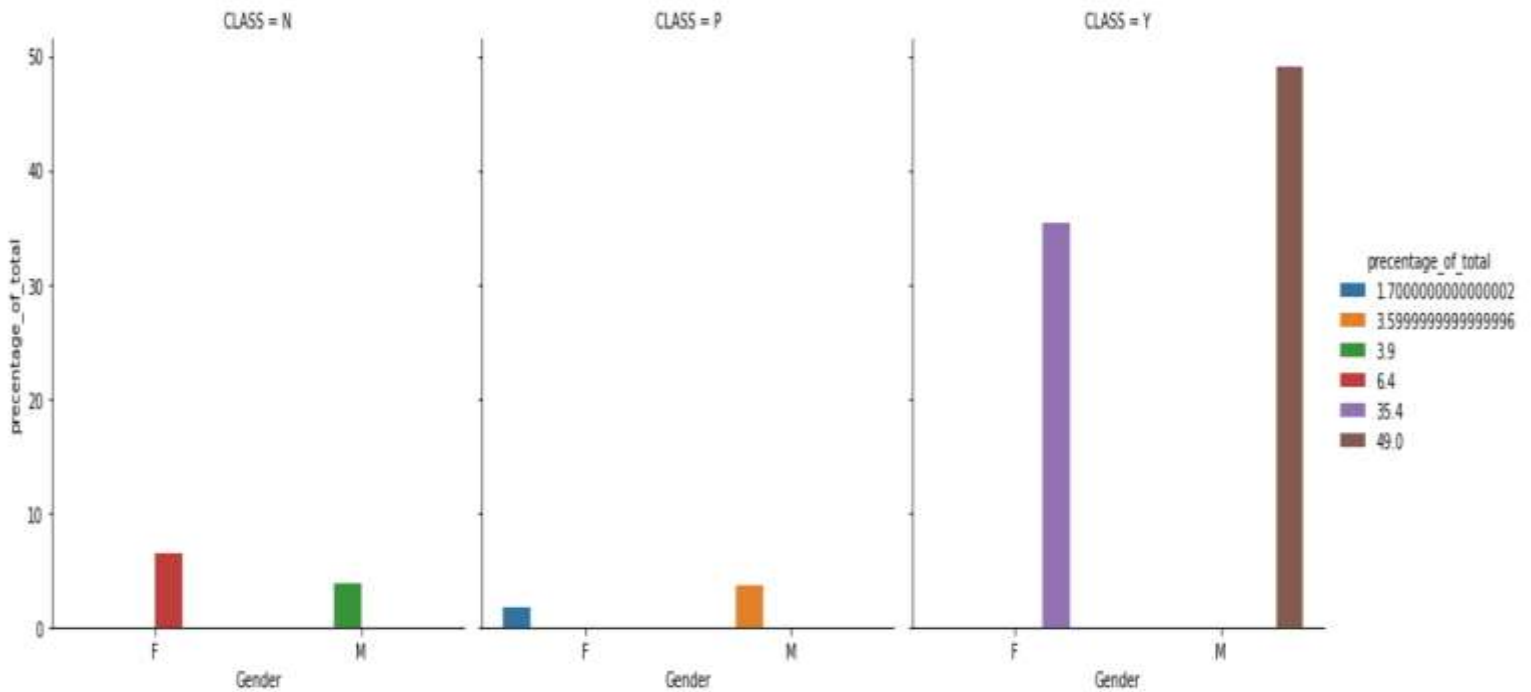
The males who have diabetes are 490, prediabetes are 36 and 39 don't have diabetes from 565

The females who have diabetes are 354, prediabetes is 16, and 64 do not have diabetes from 435.

proportion of male and female of gender



proportion of male and female of total



The proportion of males who have diabetes is **86.37 %** from males, and **49%** from total , and prediabetes is **6.37%** from males & **3.6%** from total.

while the proportion of females who have diabetes is **81.38%** from females and **35.4%** from total and prediabetes is **3.9 %** from females & **1.7%** from total.

