

**Name: Pratik Pachputr**  
**Roll no: 645**

```
import pandas as pd
# Load the CSV file into a DataFrame
df = pd.read_csv("/content/Disease_symptom_and_patient_profile_dataset.csv")
df
```

Output:

index	Disease	Fever	Cough	Fatigue	Difficulty Breathing	Age	Gender	Blood Pressure	Cholesterol Level	Outcome Variable
0	Influenza	Yes	No	Yes	Yes	19	Female	Low	Normal	Positive
1	Common Cold	No	Yes	Yes	No	25	Female	Normal	Normal	Negative
2	Eczema	No	Yes	Yes	No	25	Female	Normal	Normal	Negative
3	Asthma	Yes	Yes	No	Yes	25	Male	Normal	Normal	Positive
4	Asthma	Yes	Yes	No	Yes	25	Male	Normal	Normal	Positive
5	Eczema	Yes	No	No	No	25	Female	Normal	Normal	Positive
6	Influenza	Yes	Yes	Yes	Yes	25	Female	Normal	Normal	Positive
7	Influenza	Yes	Yes	Yes	Yes	25	Female	Normal	Normal	Positive
8	Hyperthyroidism	No	Yes	No	No	28	Female	Normal	Normal	Negative
9	Hyperthyroidism	No	Yes	No	No	28	Female	Normal	Normal	Negative
10	Asthma	Yes	No	No	Yes	28	Male	High	Normal	Positive
11	Allergic Rhinitis	No	Yes	Yes	No	29	Female	Normal	Low	Negative
12	Anxiety Disorders	No	Yes	No	No	29	Female	Normal	High	Negative
13	Common Cold	No	No	No	No	29	Female	Low	Normal	Negative
14	Diabetes	No	No	No	No	29	Male	Low	Normal	Negative
15	Gastroenteritis	No	Yes	No	No	29	Female	Normal	Normal	Negative
16	Pancreatitis	Yes	No	No	No	29	Female	High	Normal	Negative
17	Rheumatoid Arthritis	No	Yes	Yes	Yes	29	Female	High	High	Negative
18	Depression	Yes	Yes	Yes	Yes	29	Male	High	Normal	Positive

19,Liver

Cancer, Yes, Yes, Yes, Yes, 29, Female, Normal, Normal, Positive 20, Stroke,

Yes, Yes, Yes, Yes, 29, Female, Normal, Normal, Positive

21, Urinary

Tract

Infection, Yes, Yes, Yes, No, 29, Male, High, High, Positive 22, Dengue

Fever, Yes, No, Yes, No, 30, Female, Normal, Normal, Negative 23, Dengue

Fever, Yes, No, Yes, No, 30, Female, Normal, Normal, Negative 24, Eczema,

No, Yes, Yes, No, 30, Male, High, High, Negative

25, Gastroenteritis, Yes, Yes, Yes, No, 30, Male, High, High, Negative 26, Hepatitis, Yes, Yes, Yes, Yes, 30

, Male, High, Normal, Negative

27, Kidney Cancer, No, No, Yes, No, 30, Male, Normal, Normal, Negative 28, Migraine, Yes, No, No, No,

30, Female, Normal, Normal, Negative

29, Migraine, No, Yes, Yes, No, 30, Female, Normal, Normal, Negative

30, Muscular Dystrophy, No, No, Yes, No, 30, Male, High, High, Negative 31, Sinusitis, No, Yes, Yes, No,

30, Male, Normal, Normal, Negative

32, Ulcerative

Colitis, Yes, Yes, No, No, 30, Female, Normal, Normal, Negative 33, Ulcerative

Colitis, No, Yes, Yes, No, 30, Female, Normal, Normal, Negative 34, Asthma, Yes,

Yes, No, Yes, 30, Female, Normal, Normal, Positive

35, Asthma, Yes, Yes, No, Yes, 30, Female, Normal, Normal, Positive 36, Asthma, Yes, Yes, Yes, Yes, 30, F

emale, Normal, Normal, Positive

37, Bipolar Disorder, No, No, Yes, No, 30, Female, High, High, Positive 38, Bronchitis, Yes, Yes, No, Yes,

30, Female, Low, Normal, Positive

39, Bronchitis, Yes, Yes, Yes, Yes, 30, Male, High, High, Positive 40, Bronchitis, Yes, Yes, Yes, Yes, 30, Mal

e, High, High, Positive

41, Cerebral

Palsy, No, No, Yes, Yes, 30, Female, Normal, Normal, Positive 42, Colorectal

al

Cancer, No, No, Yes, No, 30, Female, Normal, High, Positive 43, Eczema, Yes,

No, No, No, 30, Male, High, High, Positive

44, Hypertensive Heart

Disease, No, No, Yes, No, 30, Female, High, High, Positive 45, Influenza, Yes, Yes, Y

es,No,30,Male,High,Normal,Positive

46,Influenza,Yes,Yes,Yes,Yes,30,Female,Normal,Normal,Positive

47,MultipleSclerosis,No,No,Yes,No,30,Female,High,High,Positive

48,MyocardialInfarction(Heart...,Yes,Yes,Yes,Yes,30,Female,High,High,Positive  
49,UrinaryTractInfection(UTI),Yes,No,No,No,30,Female,Normal,Normal,Positive50,Asthma,N  
o,No,No,Yes,31,Male,Normal,Low,Negative  
51,Osteoporosis,No,No,No,Yes,31,Male,Low,Normal,Negative52,Com  
monCold,Yes,No,Yes,Yes,31,Male,High,High,Positive  
53,Migraine,Yes,No,No,No,31,Female,Normal,Normal,Positive54,Pneumonia,Yes,No,Yes,Yes,  
32,Female,High,Normal,Positive  
55,AllergicRhinitis,No,No,Yes,No,35,Female,Normal,Low,Negative56,Asthma,No,Yes,Yes,Yes,  
35,Female,Normal,High,Negative  
57,Asthma,Yes,Yes,Yes,Yes,35,Female,Normal,Normal,Negative58,Asthma,No,Yes,Yes,Yes,35,  
Female,High,Normal,Negative  
59,Asthma,No,Yes,Yes,Yes,35,Female,High,Normal,Negative  
60,Atherosclerosis,No,No,Yes,No,35,Male,Normal,Normal,Negative  
61,ChronicObstructivePulmonary...,Yes,Yes,Yes,Yes,35,Male,Normal,Normal,Negative62,Com  
monCold,Yes,Yes,Yes,No,35,Male,High,Normal,Negative  
63,Eczema,No,Yes,No,No,35,Male,High,Normal,Negative64,Epilepsy,No,No,Yes,No,35,Male,  
High,High,Negative  
65,Hypertension,Yes,Yes,Yes,No,35,Female,High,Normal,Negative  
66,Hyperthyroidism,Yes,Yes,Yes,No,35,Female,Normal,Normal,Negative  
67,Obsessive-Compulsive  
Disorde...,No,No,Yes,No,35,Male,Normal,Normal,Negative68,Pneumonia,Yes,Yes,Yes,Yes,35  
,Female,Normal,Normal,Negative  
69,Pneumonia,Yes,Yes,Yes,Yes,35,Female,Normal,Normal,Negative70,Psoriasis,Yes,No,No,No  
,35,Female,Normal,Low,Negative  
71,Psoriasis,No,Yes,Yes,No,35,Female,Normal,Low,Negative  
72,Rubella,Yes,No,Yes,No,35,Female,High,Normal,Negative  
73,Rubella,Yes,No,Yes,No,35,Female,High,Normal,Negative  
74,UrinaryTractInfection(UTI),No,Yes,Yes,No,35,Male,High,High,Negative75,Asthma,Yes,Yes,  
No,Yes,35,Male,Normal,Normal,Positive  
76,Asthma,Yes,Yes,No,Yes,35,Male,Normal,Normal,Positive



77,Cirrhosis,No,No,Yes,No,35,Female,Normal,High,Positive  
78,Conjunctivitis (Pink  
Eye),No,Yes,No,No,35,Female,High,High,Positive79,Depression,No,No,  
Yes,No,35,Female,Normal,High,Positive  
80,Gastroenteritis,Yes,No,Yes,Yes,35,Male,Low,High,Positive  
81,Hyperthyroidism,Yes,Yes,Yes,No,35,Male,High,High,Positive  
82,Hyperthyroidism,Yes,Yes,Yes,No,35,Male,High,High,Positive  
83,KidneyCancer,No,No,Yes,No,35,Male,High,High,Positive  
84,LiverCancer,No,No,Yes,No,35,Female,High,High,Positive85,  
Liver  
Disease,No,No,Yes,No,35,Male,High,High,Positive86,Malaria,  
Yes,No,No,No,35,Male,High,High,Positive  
87,Malaria,Yes,No,No,No,35,Male,High,High,Positive88,Migraine,No,Yes,Yes,No,35,Male,Hig  
h,High,Positive89,Migraine,Yes,No,No,No,35,Male,High,High,Positive  
90,Pancreatitis,No,No,Yes,No,35,Male,Normal,High,Positive  
91,Rheumatoid  
Arthritis,Yes,Yes,Yes,No,35,Male,Normal,Low,Positive92,RheumatoidArth  
ritis,No,No,Yes,No,35,Female,Normal,Low,Positive93,SpinaBifida,No,No,Y  
es,No,35,Female,Normal,Normal,Positive  
94,Ulcerative  
Colitis,No,No,Yes,No,35,Male,High,High,Positive95,Ulcerative  
Colitis,Yes,No,No,No,35,Male,High,High,Positive  
96,Urinary  
TractInfection,Yes,No,Yes,No,35,Female,Normal,High,Positive97,AllergicR  
hinitis,No,Yes,No,No,38,Female,Low,Normal,Negative  
98,Depression,No,No,No,No,38,Female,Normal,High,Negative  
99,Gastroenteritis,No,No,No,No,38,Male,Normal,Low,Negative  
100,Influenza,No,No,No,No,38,Male,Normal,Normal,Negative  
101,KidneyDisease,No,No,Yes,No,38,Female,Low,Normal,Negative102,Liv  
erCancer,Yes,Yes,No,No,38,Female,High,Normal,Negative  
103,LiverDisease,No,Yes,No,Yes,38,Male,Low,Normal,Negative  
104,Osteoporosis,No,Yes,No,No,38,Female,Normal,High,Negative105,Stroke,Yes,Yes,No,No,

**38,Female,High,Normal,Negative**

106,Anxiety

Disorders,Yes,No,Yes,Yes,38,Male,High,High,Positive107,Diabetes,Yes,No,Yes,Yes,38,Male,H  
igh,Low,Positive

108,Migraine,Yes,Yes,No,No,38,Male,High,High,Positive

109,Osteoarthritis,Yes,Yes,Yes,No,38,Male,High,High,Positive

110,Pneumonia,Yes,Yes,Yes,Yes,38,Male,Normal,Normal,Positive

111,Klinefelter

Syndrome,No,No,Yes,No,39,Female,Normal,Normal,Positive112,Acne,No,N

o,Yes,No,40,Male,Normal,Normal,Negative

113,Brain

Tumor,No,No,Yes,No,40,Male,Normal,Normal,Negative114,Bronc

hitis,No,Yes,No,Yes,40,Female,Normal,Normal,Negative115,Cystic

Fibrosis,No,No,Yes,Yes,40,Male,High,High,Negative

116,Diabetes,Yes,No,No,No,40,Female,High,High,Negative

117,Glaucoma,No,No,Yes,No,40,Male,High,Normal,Negative

118,Osteoarthritis,No,No,Yes,No,40,Male,High,Normal,Negative119,Rabies,Yes,Yes,No,No,4

0,Female,High,Normal,Negative

120,Rabies,Yes,Yes,No,No,40,Female,High,Normal,Negative121,Asthma,Yes,No,Yes,No,40,M  
ale,Low,Normal,Positive

122,Asthma,Yes,Yes,No,Yes,40,Female,Normal,Normal,Positive

123,Asthma,Yes,Yes,No,Yes,40,Female,Normal,Normal,Positive

124,Asthma,No,No,Yes,Yes,40,Male,High,High,Positive

125,Asthma,Yes,No,Yes,Yes,40,Male,Normal,High,Positive126,Asthma,Yes,No,Yes,Yes,40,Male  
,Normal,High,Positive

127,Chickenpox,No,Yes,No,No,40,Male,Normal,High,Positive128,Chickenpox,No,Yes,No,No,4  
0,Male,Normal,High,Positive

129,CoronaryArteryDisease,No,No,Yes,No,40,Female,High,High,Positive

130,"Eating Disorders

(Anorexia,...",No,No,Yes,No,40,Female,High,High,Positive131,Fibromyalgia,No,

No,Yes,No,40,Female,High,High,Positive

132,Gastroenteritis,Yes,Yes,Yes,No,40,Male,High,High,Positive

133,Hemophilia,No,No,Yes,No,40,Female,Normal,Normal,Positive

134,Hyperthyroidism,No,No,Yes,No,40,Male,High,High,Positive



135,Hypoglycemia,No,No,Yes,No,40,Female,High,High,Positive 136,Lymphoma,No,Yes,No,N  
 o,40,Female,Normal,High,Positive 137,Pneumonia,Yes,Yes,Yes,Yes,40,Female,Normal,High,Po  
 sitive 138,Psoriasis,No,Yes,Yes,No,40,Male,High,Normal,Positive  
 139,Psoriasis,Yes,No,No,No,40,Male,High,Normal,Positive  
 140,Psoriasis,No,Yes,No,No,40,Female,Normal,High,Positive  
 141,Tuberculosis,Yes,Yes,Yes,Yes,40,Male,High,High,Positive  
 142,Tuberculosis,Yes,Yes,Yes,Yes,40,Male,High,High,Positive  
 143,Anxiety  
 Disorders,No,No,No,No,42,Male,Low,Normal,Negative 144,Commo  
 nCold,Yes,Yes,No,No,42,Female,High,High,Negative  
 145,Depression,Yes,No,No,Yes,42,Male,High,Normal,Negative 146,Influenza,No,Yes,No,No,42  
 ,Female,Normal,High,Negative  
 147,KidneyCancer,Yes,No,No,No,42,Female,Normal,Normal,Negative 148,  
 LiverCancer,Yes,No,Yes,Yes,42,Male,Normal,Low,Negative  
 149,LiverDisease,Yes,No,No,Yes,42,Female,Normal,Normal,Negative 150,L  
 ungCancer,Yes,No,Yes,Yes,42,Male,Normal,Low,Negative  
 151,Migraine,Yes,Yes,Yes,No,42,Male,High,High,Negative  
 152,Osteoarthritis,No,No,Yes,No,42,Male,Normal,Low,Negative 153,Stroke,Yes,No,Yes,No,42  
 ,Male,Normal,Low,Negative  
 154,UrinaryTractInfection,No,Yes,Yes,Yes,42,Female,Normal,Low,Negative 155,Diabetes,Yes,Y  
 es,Yes,No,42,Male,High,Normal,Positive  
 156,Hypothyroidism,Yes,Yes,Yes,No,42,Female,High,High,Positive  
 157,Hypothyroidism,Yes,Yes,Yes,No,42,Female,High,High,Positive  
 158,KidneyDisease,Yes,No,Yes,No,42,Female,High,Low,Positive  
 159,Pneumonia,No,Yes,Yes,Yes,43,Female,High,Normal,Positive  
 160,AllergicRhinitis,No,Yes,Yes,No,45,Male,High,Normal,Negative  
 161,Autism Spectrum Disorder  
 (ASD),No,No,Yes,No,45,Male,Normal,Normal,Negative 162,Crohn'sDisease,Yes,No,Yes,No,45  
 ,Male,High,Normal,Negative  
 163,Hepatitis,Yes,No,Yes,No,45,Female,High,High,Negative

164,Hepatitis,Yes,No,Yes,No,45,Female,High,High,Negative

165,Hyperglycemia,No,No,Yes,No,45,Male,Normal,Normal,Negative166,Ki

dneyCancer,No,Yes,Yes,Yes,45,Male,Normal,Low,Negative

167,KidneyDisease,Yes,Yes,No,No,45,Male,Normal,High,Negative168,Melanoma,Yes,No,Yes,

No,45,Male,High,Normal,Negative

169,Migraine,No,No,No,No,45,Female,Low,Normal,Negative

170,OvarianCancer,No,No,Yes,No,45,Male,Normal,Normal,Negative171,Pancreatitis,No,Yes,

Yes,Yes,45,Male,Normal,Low,Negative

172,Rheumatoid

Arthritis,Yes,No,No,No,45,Male,Normal,Normal,Negative173,Stroke,No,No,Yes,No,45,Male,

Normal,Normal,Negative

174,TurnerSyndrome,No,No,Yes,No,45,Male,High,High,Negative175,Turne

rSyndrome,No,No,Yes,No,45,Male,High,High,Negative

176,Urinary Tract

Infection,No,No,No,No,45,Female,Low,Normal,Negative177,ZikaVirus,No,

Yes,Yes,No,45,Female,High,High,Negative

178,ZikaVirus,No,Yes,Yes,No,45,Female,High,High,Negative

179,AllergicRhinitis,Yes,Yes,Yes,No,45,Male,High,Normal,Positive

180,Anxiety

Disorders,Yes,Yes,Yes,No,45,Male,High,Normal,Positive181,Asthma

,Yes,Yes,No,Yes,45,Male,Normal,Normal,Positive

182,Asthma,Yes,Yes,No,Yes,45,Male,Normal,Normal,Positive183,Cataracts,No,No,Yes,No,45,

Female,Normal,High,Positive

184,Crohn's

Disease,No,No,Yes,No,45,Female,High,High,Positive185,Crohn's

Disease,Yes,Yes,Yes,No,45,Female,High,High,Positive186,Depres

sion,No,No,Yes,No,45,Female,High,High,Positive

187,Diabetes,Yes,No,Yes,No,45,Female,High,High,Positive188,Diabetes,No,Yes,Yes,No,45,Ma

le,Normal,High,Positive

189,Hypertension,Yes,No,Yes,No,45,Male,Normal,High,Positive190,Hypothyroidism,No,No,

Yes,No,45,Female,High,High,Positive

191,Liver

Disease, Yes, Yes, Yes, No, 45, Female, Normal, High, Positive 192, Multiple Scler  
osis, Yes, No, No, No, 45, Female, High, High, Positive

193, Multiple

Sclerosis, Yes, No, No, No, 45, Female, High, High, Positive 194, Osteoarthritis, Yes, No, Yes, Yes, 45, Male, High, Normal, Positive

195, Osteoporosis, Yes, Yes, Yes, No, 45, Female, Normal, High, Positive

196, Pneumocystis

Pneumonia (PCP), Yes, Yes, Yes, No, 45, Female, High, High, Positive 197, Pneumonia, Yes, Yes, Yes, Yes, 45, Male, High, High, Positive

198, Scoliosis, No, No, No, No, 45, Female, High, High, Positive

199, Sickle Cell

Anemia, No, No, Yes, No, 45, Female, Normal, Normal, Positive 200, Tetanus, No, No, Yes, No, 45, Male, Normal, High, Positive

201, Tetanus, No, No, Yes, No, 45, Male, Normal, High, Positive

202, Hypertension, No, No, No, No, 48, Female, Low, High, Negative

203, Hypothyroidism, No, No, Yes, No, 48, Male, Normal, High, Negative

204, Hypothyroidism, No, No, Yes, No, 48, Male, Normal, High, Negative

205, Allergic Rhinitis, Yes, No, No, No, 50, Male, High, High, Negative

206, Anemia, No, No, Yes, No, 50, Male, Normal, Normal, Negative

207, Anxiety

Disorders, No, No, Yes, No, 50, Male, Normal, Normal, Negative 208, Cholera, Yes, No, Yes, Yes, 50, Female, High, High, Negative

209, Cholera, Yes, No, Yes, Yes, 50, Female, High, High, Negative

210, Crohn's

Disease, Yes, Yes, Yes, No, 50, Male, Normal, High, Negative 211, Crohn's

Disease, No, No, Yes, No, 50, Male, Normal, High, Negative 212, Depression, No, Yes, Yes, No, 50, Female, Low, Low, Negative

213, Diabetes, No, Yes, No, No, 50, Male, Normal, High, Negative

214, Endometriosis, Yes, No, No, No, 50, Male, High, Normal, Negative 215, Hypertension, No, Yes, No, No, 50, Female, Normal, Low, Negative

216, Hypothyroidism, Yes, Yes, Yes, No, 50, Male, Normal, High, Negative 217, Kidney Cancer, No, Yes, No, No, 50, Male, Low, High, Negative

218, Kidney Disease, No, Yes, No, Yes, 50, Male, Normal, Normal, Negative 219, Pancreatitis, No, Yes, No, No, 50, Male, Low, High, Negative

220,RheumatoidArthritis,No,Yes,No,No,50,Female,Low,Normal,Negative221,Sepsis,Yes,Yes,Y  
es,No,50,Male,Normal,Normal,Negative



222,SleepApnea,Yes,No,Yes,Yes,50,Male,High,High,Negative

223,Urinary Tract

Infection,Yes,Yes,No,Yes,50,Male,High,Normal,Negative224,Asthma,Yes,

Yes,Yes,Yes,50,Female,Normal,High,Positive

225,Bronchitis,Yes,Yes,Yes,Yes,50,Male,High,High,Positive

226,Down

Syndrome,No,No,Yes,No,50,Female,High,High,Positive227,Ebola

Virus,Yes,Yes,Yes,Yes,50,Male,Normal,Normal,Positive228,EbolaVi

rus,Yes,Yes,Yes,Yes,50,Male,Normal,Normal,Positive229,Eczema,

No,Yes,No,No,50,Female,High,High,Positive

230,Gastroenteritis,Yes,Yes,Yes,Yes,50,Female,High,Normal,Positive

231,Klinefelter

Syndrome,No,No,Yes,No,50,Female,Normal,Normal,Positive232,LiverCance

r,No,Yes,Yes,Yes,50,Male,High,High,Positive

233,Lyme

Disease,Yes,No,No,No,50,Male,Normal,High,Positive234,Lyme

Disease,Yes,No,No,No,50,Male,Normal,High,Positive

235,PancreaticCancer,No,No,Yes,No,50,Female,High,High,Positive236,Pneumothorax,No,No,

Yes,Yes,50,Female,High,High,Positive

237,Stroke,No,Yes,Yes,Yes,50,Male,High,High,Positive

238,UlcerativeColitis,No,Yes,Yes,No,50,Female,Normal,High,Positive239,Hypertension,Yes,Y

es,No,No,52,Male,Normal,Low,Negative

240,Multiple

Sclerosis,No,Yes,Yes,No,52,Male,Normal,Normal,Negative241,Multiple

Sclerosis,No,Yes,Yes,No,52,Male,Normal,Normal,Negative242,Appendi

citis,Yes,No,Yes,No,55,Male,Normal,Normal,Negative

243,Bronchitis,No,No,Yes,Yes,55,Male,High,High,Negative

244,Bronchitis,Yes,Yes,Yes,Yes,55,Male,High,Normal,Negative

245,CommonCold,Yes,No,Yes,Yes,55,Male,Normal,Low,Negative246,Diabetes,No,Yes,No,No,

55,Female,Normal,High,Negative

247,EsophagealCancer,No,No,Yes,No,55,Male,Normal,Normal,Negative248,HIV/AIDS,Yes,No

,No,No,55,Female,High,High,Negative



249,HIV/AIDS,Yes,No,No,No,55,Female,High,High,Negative

250,Hypertension,No,Yes,No,No,55,Female,Normal,Low,Negative

251,LiverDisease,No,Yes,Yes,No,55,Male,High,Low,Negative

252,Marfan

Syndrome,No,No,Yes,No,55,Male,High,High,Negative253,Migraine,No,Yes,Yes,Yes,55,Female,Normal,Low,Negative

254,Osteoporosis,No,No,Yes,No,55,Male,High,Normal,Negative

255,Parkinson's

Disease,No,No,Yes,No,55,Female,Normal,Low,Negative256,Parkinson's

Disease,No,No,Yes,No,55,Female,Normal,Low,Negative257,AnxietyDisorders,Yes,Yes,No,No,55,Female,Normal,Low,Positive

258,Coronary Artery

Disease,No,No,Yes,No,55,Female,Normal,Normal,Positive259,Coronary Artery

Disease,No,No,Yes,No,55,Female,Normal,Normal,Positive260,Hemorrhoids,No,No,No,No,55,Female,High,High,Positive

261,Hypertension,Yes,No,Yes,No,55,Male,High,Normal,Positive262,Hypothyroidism,No,No,Yes,No,55,Female,High,High,Positive263,Osteoarthritis,Yes,Yes,No,No,55,Female,High,High,Positive

264,Osteoporosis,Yes,No,Yes,Yes,55,Male,High,Low,Positive

265,Osteoporosis,No,Yes,Yes,No,55,Female,Normal,Normal,Positive

266,Osteoporosis,Yes,No,Yes,No,55,Female,Normal,Normal,Positive

267,Osteoporosis,Yes,No,Yes,No,55,Female,Normal,Normal,Positive

268,Polycystic Ovary Syndrome

(PCOS),Yes,Yes,No,No,55,Female,Normal,Normal,Positive269,SystemicLupusErythematosus...,No,Yes,Yes,No,55,Female,High,High,Positive

270,Typhoid

Fever,No,Yes,No,No,55,Male,Normal,Low,Positive271,Typhoid

Fever,No,Yes,No,No,55,Male,Normal,Low,Positive272,Influenza,Yes,Yes,Yes,Yes,56,Male,High,High,Positive

273,Pneumonia,Yes,Yes,No,Yes,57,Male,Normal,High,Negative

274,BreastCancer,No,No,Yes,No,60,Male,High,High,Negative

275,Coronary Artery

Disease,Yes,Yes,No,No,60,Male,High,High,Negative276,Coronary Artery

Disease,Yes,Yes,No,No,60,Male,High,High,Negative277,Hyperthyroidis

m,No,No,Yes,No,60,Male,Normal,Normal,Negative

278,Measles,Yes,Yes,No,No,60,Female,High,Normal,Negative279,Measles,Yes,Yes,No,No,60,

Female,High,Normal,Negative

280,Osteoarthritis,No,Yes,No,Yes,60,Female,Normal,Normal,Negative281,Osteomyelitis,No,  
No,Yes,No,60,Male,Normal,Normal,Negative

282,Osteoporosis,Yes,No,No,No,60,Male,High,High,Negative283,Osteoporosis,No,Yes,No,No,  
60,Male,High,High,Negative284,Osteoporosis,No,Yes,No,No,60,Male,High,High,Negative285,  
Polio,Yes,Yes,Yes,No,60,Male,Normal,Normal,Negative286,Asthma,Yes,Yes,Yes,Yes,60,Fema  
le,High,High,Positive

287,Chronic Kidney  
Disease,No,No,Yes,No,60,Female,Normal,High,Positive288,Hemophilia,No  
,No,Yes,No,60,Female,Normal,Normal,Positive

289,Hepatitis  
B,No,Yes,Yes,No,60,Male,Normal,Low,Positive290,Hepatitis  
B,No,Yes,Yes,No,60,Male,Normal,Low,Positive

291,Hypertension,No,No,Yes,No,60,Female,High,Normal,Positive292,Hypertension,Yes,No,Y  
es,No,60,Male,High,Normal,Positive

293,Hypertension,No,No,No,No,60,Female,High,High,Positive

294,KidneyCancer,Yes,Yes,Yes,No,60,Female,High,Normal,Positive295,Kidn  
ey  
Disease,Yes,Yes,Yes,Yes,60,Female,High,High,Positive296,Osteoporosis,Ye  
s,No,Yes,No,60,Male,High,Normal,Positive

297,Pancreatitis,Yes,Yes,Yes,No,60,Female,High,Normal,Positive

298,Parkinson'sDisease,Yes,Yes,No,No,60,Male,High,Normal,Positive299,P  
arkinson'sDisease,Yes,Yes,No,No,60,Male,High,Normal,Positive

300,Prader-Willi  
Syndrome,No,No,Yes,No,60,Female,Normal,Normal,Positive301,Rheumatoid  
Arthritis,No,No,Yes,No,60,Female,High,High,Positive

302,ThyroidCancer,No,No,Yes,No,60,Female,High,High,Positive303,Tuberculosis,Yes,Yes,Yes,  
No,60,Female,High,High,Positive

304,BladderCancer,No,No,Yes,No,65,Male,Normal,Normal,Negative305,Diabetes,No,No,Yes,  
No,65,Male,Normal,High,Negative

306,Otitis Media (Ear  
Infection),Yes,Yes,Yes,No,65,Male,Normal,Normal,Negative307,Stroke,Yes,No,Yes,No,65,Fe  
male,High,Low,Negative

308,Stroke,Yes,No,Yes,No,65,Female,High,Low,Negative

309,TouretteSyndrome,No,No,Yes,No,65,Male,High,High,Negative

310,UrinaryTractInfection(UTI),Yes,No,Yes,No,65,Male,High,Normal,Negative311,Alzheimer's  
Disease,No,Yes,No,No,65,Male,Normal,High,Positive

312,Alzheimer's  
Disease,No,Yes,No,No,65,Male,Normal,High,Positive313,Alzheimer's  
Disease,No,No,Yes,No,65,Female,High,High,Positive314,Bronchitis,Y  
es,No,Yes,Yes,65,Male,High,High,Positive

315,ChronicObstructivePulmonaryDisease  
(COPD),Yes,No,Yes,Yes,65,Female,High,High,Positive

316,ChronicObstructivePulmonaryDisease  
(COPD),Yes,No,Yes,Yes,65,Female,High,High,Positive

317,Dementia,No,No,Yes,No,65,Female,High,High,Positive

318,Diabetes,Yes,Yes,Yes,No,65,Female,Normal,High,Positive

319,Diverticulitis,No,No,Yes,No,65,Female,High,High,Positive

320,Liver  
Cancer,Yes,Yes,Yes,No,65,Female,High,High,Positive321,Lung  
Cancer,Yes,Yes,Yes,No,65,Female,High,High,Positive

322,Lung  
Cancer,Yes,No,Yes,No,65,Female,Normal,High,Positive323,Mumps,No,No,Yes,No,65,Male,N  
ormal,High,Positive

324,Mumps,No,No,Yes,No,65,Male,Normal,High,Positive

325,Osteoporosis,No,Yes,Yes,No,65,Female,High,High,Positive326,Stroke,Yes,Yes,Yes,No,65,  
Female,High,High,Positive

327,Alzheimer's  
Disease,Yes,No,Yes,No,70,Female,High,Normal,Negative328,Alzheimer's  
Disease,Yes,No,Yes,No,70,Female,High,Normal,Negative329,Cholecystiti  
s,No,No,Yes,No,70,Male,Normal,Normal,Negative

330,ChronicObstructivePulmonaryDisease  
(COPD),No,Yes,Yes,Yes,70,Male,Normal,High,Negative

331,ChronicObstructivePulmonaryDisease  
(COPD),No,Yes,Yes,Yes,70,Male,Normal,High,Negative

332,Osteoporosis,Yes,No,No,No,70,Male,Normal,Normal,Negative

333,Parkinson's



Disease,No,No,Yes,No,70,Male,Normal,Normal,Negative334,ProstateCa  
ncer,Yes,Yes,No,No,70,Male,High,Normal,Negative  
335,Schizophrenia,No,Yes,Yes,No,70,Male,Normal,Normal,Negative

336,Gout,Yes,No,Yes,No,70,Female,Normal,High,Positive

337,Migraine,No,No,Yes,No,70,Female,Normal,Normal,Positive338,Stroke,No,Yes,No,No,70,  
Male,Normal,High,Positive

339,Stroke,No,Yes,No,No,70,Male,Normal,High,Positive

340,Testicular

Cancer,No,No,Yes,No,70,Female,High,High,Positive341,Tonsillitis,

Yes,Yes,Yes,No,70,Female,High,High,Positive

342,WilliamsSyndrome,No,No,Yes,No,70,Female,Normal,Normal,Positive343,Stroke,Yes,No,

Yes,No,80,Female,High,High,Positive

344,Stroke,Yes,No,Yes,No,80,Female,High,High,Positive

345,Stroke,Yes,No,Yes,No,85,Male,High,High,Positive

346,Stroke,Yes,No,Yes,No,85,Male,High,High,Positive

347,Stroke,Yes,No,Yes,No,90,Female,High,High,Positive

348,Stroke,Yes,No,Yes,No,90,Female,High,High,Positive

```
#Numberofpatientsdiagnosedwithasthma
asthma_patients = df[df['Disease'] ==
'Asthma'].shape[0]print(asthma_patients)
```

Output:

23

```
#Most common disease among female
patientsmost_common_disease_female =
df[df['Gender']
=='Female']['Disease'].value_counts().idxmax()
```

Output:

Asthma

```
#Patients with high blood pressure and normal cholesterol
levelshigh_bp_normal_cholesterol=df[(df['BloodPressure']=='High')]
print(high_bp_normal_cholesterol)
```

Output:

	Disease	Fever	Cough	Fatigue	DifficultyBreathing
Age \					
10	Asthma	Yes	No	No	Yes
28					
16	Pancreatitis	Yes	No	No	No
29					
17	RheumatoidArthritis	No	Yes	Yes	Yes
29					
18	Depression	Yes	Yes	Yes	Yes
29					

21	Urinary Tract Infection	Yes	Yes	Yes	No
29					
..	...	...	...	...	...
...					
344	Stroke	Yes	No	Yes	No
80					
345	Stroke	Yes	No	Yes	No
85					
346	Stroke	Yes	No	Yes	No
85					
347	Stroke	Yes	No	Yes	No
90					
348	Stroke	Yes	No	Yes	No
90					

	Gender	BloodPressure	CholesterolLevel	Outcome	Variable
10	Male	High	Normal	Positive	
16	Female	High	Normal	Negative	
17	Female	High	High	Negative	
18	Male	High	Normal	Positive	
21	Male	High	High	Positive	
..	...	...	...	...	...
344	Female	High	High	Positive	
345	Male	High	High	Positive	
346	Male	High	High	Positive	
347	Female	High	High	Positive	
348	Female	High	High	Positive	

```
[167rowsx10columns]
```

```
#Numberofpatientstestedpositiveforinfluenza
influenza_patients = df[df['Disease'] ==
'Influenza'].shape[0]print(influenza_patients)
```

Output:

```
8
```

```
#Gender distribution among patients with rheumatoid
arthritisrheumatoid_arthritis_gender_distribution =
df[df['Disease']
=='RheumatoidArthritis']['Gender'].value_counts()
```

Output:

```
Female    4
Male      2
Name: Gender, dtype: int64
```

```
#Average age of patients with a positive outcome
variableavg_age_positive_outcome = df[df['Outcome
Variable'] == 'Positive']['Age'].mean()
print(avg_age_positive_outcome)
```

Output:

```
46.97849462365591
```

```
#Patientswithbotheeczemaanddepression
```

```
eczema_depression_patients=df[(df['Disease']=='Eczema') &
(df['Outcome Variable'] ==
'Depression')].shape[0]print(eczema_depression_pat
```

**Output:**

0