Libraries Used

```
import
pandas as
pd import
seaborn
as sns
import matplotlib.pyplot as plt
%matpl
otlib
inline
import
numpy
as   np
import
warnin
gs
warnings.filterwarnings('ignore')
from sklearn.naive_bayes import
MultinomialNBfrom sklearn.metrics
import accuracy_score
```

- Reading dataset and Finding the shape:

```
df =
pd.read_csv('Training.c
sv')df.shape
```

- Finding the Null Values and checking weather the dataset is balanced or not:

```
df.isnull().sum().sort_values(ascending=False)
df['prognosis'].value_counts(normalize =
True)
```

- Checking the co-relation between the symptoms:

```
corr =
df.corr()
mask =
np.array(
corr)
mask[np.tril_indices_from(mask)] = False
plt.subplots_adjust(left = 0.5, right = 16 ,
top = 20,bottom = 0.5)
```

```
sns.heatmap(corr, mask=mask,vmax=.9,
square=True,annot
=True, cmap="YlGnBu")
```

- Dividing into training and testing:

```
x_train, x_test, y_train, y_test =
train_test_split(x, y, test_size=0.33,
random_state=42)
```