```python
import numpy as np
import pandas as pd
```

```python
df=pd.read_csv('/content/covid_toy - covid_toy.csv')
```

```python
df.head(2)
```

	age	gender	fever	cough	city	has_covid
0	60	Male	103.0	Mild	Kolkata	No
1	27	Male	100.0	Mild	Delhi	Yes

```python
df.isnull().sum()
```

	0
age	0
gender	0
fever	10
cough	0
city	0
has_covid	0

dtype: int64

```python
df['fever']=df['fever'].fillna(df['fever'].mean())
```

```python
df.head(2)
```

	age	gender	fever	cough	city	has_covid
0	60	Male	103.0	Mild	Kolkata	No
1	27	Male	100.0	Mild	Delhi	Yes

```python
from sklearn.preprocessing import LabelEncoder
```

```python
lb=LabelEncoder()
```

```python
df['city']=lb.fit_transform(df['city'])
df['gender']=lb.fit_transform(df['gender'])
df['cough']=lb.fit_transform(df['cough'])
```

```python
x=df.drop(columns=["has_covid"])
y=df["has_covid"]
```

```python
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,test_size=0.2,random_state=42)
```

```python
from sklearn import svm
```

```python
from sklearn.metrics import accuracy_score
```

```python
linear_SVC=svm.SVC(kernel='linear')
linear_SVC.fit(x_train,y_train)
linear_predictions=linear_SVC.predict(x_test)
linear_accuracy=accuracy_score(y_test,linear_predictions)
print("linear Kernel Accuracy:",linear_accuracy)
```

```
linear Kernel Accuracy: 0.65
```

```python
poly_SVC=svm.SVC(kernel='poly',degree=3)
poly_SVC.fit(x_train,y_train)
poly_predictions=poly_SVC.predict(x_test)
poly_accuracy=accuracy_score(y_test,poly_predictions)
print("Polynomial Kernel Accuracy:",poly_accuracy)
```

```
Polynomial Kernel Accuracy: 0.65
```

```
rbf_SVC=svm.SVC(kernel='rbf',degree=3)
rbf_SVC.fit(x_train,y_train)
rbf_predictions=rbf_SVC.predict(x_test)
rbf_accuracy=accuracy_score(y_test,rbf_predictions)
print("rbf Kernel Accuracy:",rbf_accuracy)
```

```
rbf Kernel Accuracy: 0.65
```