Please enter symptoms separated by comma(,): coughing, pyrexia, tire, loss of smell

```
1 : red
2: feeling need urinate right away
3: loss smell
4 : fatique
5 : trouble sensation
6 : fever
7 : crawl
8 : feeling like passing
Please select the relevant symptoms. Enter indices (separated-space):
0 3 4 6
```

Top matching symptoms from your search!

0 : coughing

```
Common co-occuring symptoms:
0 : headache
1 : testicular pain
2 : vomiting
3 : sore throat
4 : barky cough
Do you have have of these symptoms? If Yes, enter the indices (space-separated), 'no' to stop, '-1' to skip:
Common co-occuring symptoms:
0 : maculopapular rash
1 : confusion
2 : diarrhea
3 : runny nose
4 : shortness breath
Do you have have of these symptoms? If Yes, enter the indices (space-separated), 'no' to stop, '-1' to skip:
Common co-occuring symptoms:
0 : feeling tired
1 : swollen lymph node
2 : unintended weight loss
3 : chest pain
4 : tiredness
Do you have have of these symptoms? If Yes, enter the indices (space-separated), 'no' to stop, '-1' to skip:
no
```

C→

Final list of Symptoms that will be used for prediction: coughing headache fatigue tiredness loss smell fever sore throat barky cough shortness breath unintended weight loss

```
Top 10 diseases predicted based on symptoms
O Disease name: Coronavirus disease 2019 (COVID-19)
                                                  Probability: 74.33%
1 Disease name: Asthma Probability: 44.6%
2 Disease name: Middle East respiratory syndrome coronavirus (MERS-CoV)
                                                                           Probability: 44.6%
3 Disease name: Legionellosis Probability: 44.6%
4 Disease name: Influenza
                             Probability: 44.6%
5 Disease name: Brucellosis Probability: 29.73%
6 Disease name: Chronic obstructive pulmonary disease (COPD)
                                                            Probability: 29.73%
7 Disease name: Neonatal Respiratory Disease Syndrome(NRDS)
                                                            Probability: 29.73%
8 Disease name: Coronary Heart Disease Probability: 29.73%
9 Disease name: Pulmonary embolism
                                     Probability: 29.73%
More details about the disease? Enter index of disease or '-1' to discontinue and close the system:
0
Coronavirus disease 2019 (COVID-19)
Other names -
 Coronavirus
COVID
2019-nCoV acute respiratory disease
Novel coronavirus pneumonia
Severe pneumonia with novel pathogens
                       /kəˈroʊnəˌvaɪrəs dɪˈziːz/ /ˌkoʊvɪdnaɪ
Pronunciation -
Specialty - Infectious disease
Symptoms - Fever, cough, fatigue, shortness of breath, loss of smell, sometimes no symptoms at all
Complications - Pneumonia, viral sepsis, acute respiratory distress syndrome, kidney failure, cytokine release syndrome
Usual onset - 2-14 days (typically 5) from infection
Causes - Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
Risk factors - Travel, viral exposure
Diagnostic method - rRT-PCR testing, CT scan
Prevention - Hand washing, face coverings, quarantine, social distancing
Treatment - Symptomatic and supportive
Frequency - 4,444,670 confirmed cases
Deaths - 302,493 ( 68% of confirmed cases)
```

→ Accuracy (MNB) : 83.71% Recall (MNB) : 0.8371040723981901% Cross Validation Accuracy (MNB): 84.50% Accuracy (RF) : 89.59% Recall (RF): 0.8959276018099548% Cross Validation Accuracy (RF): 87.14% Accuracy (LR) : 89.14% Recall (LR): 0.8914027149321267% Cross Validation Accuracy (LR): 89.19% Accuracy (DT) : 90.27% Recall (DT): 0.9027149321266968% Cross Validation Accuracy (DT): 83.62%