CODE -

```prolog
go:-
hypothesis(Disease),
write('It is suggested that the patient has '),
write(Disease),
nl,
undo;
write('Sorry, the system is unable to identify the disease'),nl,undo.


hypothesis(cold) :-
symptom(headache),
symptom(runny_nose),
symptom(sneezing),
symptom(sore_throat),
nl,
write('Advices and Sugestions:'),
nl,
write('1: Tylenol'),
nl,
write('2: Panadol'),
nl,
write('3: Nasal spray'),
nl,
write('Please weare warm cloths because'),
nl,!.


hypothesis(influenza) :-
symptom(sore_throat),
symptom(fever),
symptom(headache),
symptom(chills),
```

```prolog
symptom(body_ache),

nl,

write('Advices and Sugestions:'),

nl,

write('1: Tamiflu'),

nl,

write('2: Panadol'),

nl,

write('3: Zanamivir'),

nl,

write('Please take a warm bath and do salt gargling because'),

nl,!.


hypothesis(typhoid) :-

symptom(headache),

symptom(abdominal_pain),

symptom(poor_appetite),

symptom(fever),

nl,

write('Advices and Sugestions:'),

nl,

write('1: Chloramphenicol'),

nl,

write('2: Amoxicillin'),

nl,

write('3: Ciprofloxacin'),

nl,

write('4: Azithromycin'),

nl,

write('Please do complete bed rest and take soft diet because'),

nl,!.
```

```prolog
hypothesis(chicken_pox) :-
symptom(rash),
symptom(body_ache),
symptom(fever),
nl,
write('Advices and Sugestions:'),
nl,
write('1: Varicella vaccine'),
nl,
write('2: Immunoglobulin'),
nl,
write('3: Acetomenaphin'),
nl,
write('4: Acyclovir'),
nl,
write('Please do have oatmeal bath and stay at home because'),
nl.

hypothesis(measles) :-
symptom(fever),
symptom(runny_nose),
symptom(rash),
symptom(conjunctivitis),
nl,
write('Advices and Sugestions:'),
nl,
write('1: Tylenol'),
nl,
write('2: Aleve'),
nl,
```

```prolog
write('3: Advil'),

nl,

write('4: Vitamin A'),

nl,

write('Please get rest and use more liquid because'),

nl,!.


hypothesis(malaria) :-

symptom(fever),

symptom(sweating),

symptom(headache),

symptom(nausea),

symptom(vomiting),

symptom(diarrhea),

nl,

write('Advices and Sugestions:'),

nl,

write('1: Aralen'),

nl,

write('2: Qualaquin'),

nl,

write('3: Plaquenil'),

nl,

write('4: Mefloquine'),

nl,

write('Please do not sleep in open air and cover your full skin because'),

nl,!.


ask(Question) :-

write('Does the patient has the symptom '),

write(Question),
```

```prolog
write('? : '),

read(Response),

nl,

( (Response == yes ; Response == y)

->

assert(yes(Question)) ;

assert(no(Question)), fail).

:- dynamic yes/1,no/1.


symptom(S) :-

(yes(S)

->

true ;

(no(S)

->

fail ;

ask(S))).


undo :- retract(yes()),fail. undo :- retract(no()),fail.

undo.
```

OUTPUT:

?- go.
Does the patient has the symptom headache? : y.

Does the patient has the symptom runny_nose? : |: n.

Does the patient has the symptom sore_throat? : |: y.

Does the patient has the symptom fever? : |: y.

Does the patient has the symptom chills? : |: y.

Does the patient has the symptom body_ache? : |: y.

Advices and Sugestions:
1: Tamiflu
2: Panadol
3: Zanamivir
Please take a warm bath and do salt gargling because
It is suggested that the patient has influenza
true .

?-