ass 6 expert system

Implement any one of the following Expert System

I. Information management

II. Hospitals and medical facilities

III. Help desks management

IV. Employee performance evaluation

V. Stock market trading

VI. Airline scheduling and cargo schedules

```
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,
```

```prolog
write('3: Nasal spray'),

nl,

write('Please weare warm cloths because'),

nl,!.



hypothesis(influenza) :-

symptom(sore_throat),

symptom(fever),

symptom(headache),

symptom(chills),

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,
```

```prolog
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,!.



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.
```

```prolog
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,

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:'),
```

```prolog
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),
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-

vnd@vnd-Lenovo-H520e:~$ swipl -s medicalExpert.pl

Welcome to SWI-Prolog (threaded, 64 bits, version 8.0.2)

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Please run ?- license. for legal details.


For online help and background, visit http://www.swi-prolog.org

For built-in help, use ?- help(Topic). or ?- apropos(Word).


?- 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 .

?-

*/

ass 6 done