

CSE341 PL HW3

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Homework Explanation

Running Prolog

For running this homework, you should install prolog.

You can use following: https://www-pi.github.io/tutorials/lectures/lsp/010_install_swi_prolog.html

After installing, you can run files and can run queries.

Report Explanation

In report, First, I give the running rule and after that, I gave command and command running result.

Part 1 `expert.pl`

Run

Type this in your terminal

```
prolog experts.pl
```

After execution, you can you the following commands tu run queries

Conflict Command

Check between two courses, if there is a conflict about their times, return yes.

```
conflict(math, biology).
```

Conflict Command Result

```
?- conflict(math, biology).  
false.
```

Since, there is no conflict, it gives false.

can_assign_course_room Command

Checks if the given room can assigned given class

```
can_assign_course_room(z06, math).
```

can_assign_course_room Result

```
?- can_assign_course_room(z06, math).  
false.
```

It gives false since it can be assigned.

which_room_can_assigned Command

find a room for given course

```
which_room_can_assigned(math).
```

which_room_can_assigned Result

```
?- which_room_can_assigned(math).  
math can be assigned to z23  
true.
```

can_assign_student_course Command

check if the given student can assigned given class

```
can_assign_student_course(1, math).
```

can_assign_student_course Result

```
?- can_assign_student_course(1, math).  
true
```

which_course_can_assigned Command

Find a course to given student

```
which_course_can_assigned(1).
```

which_course_can_assigned Result

```
?- which_course_can_assigned(1).  
1 can be assigned to math  
true
```

Part 2 `flights.pl`

Run

Run this command in your terminal

```
prolog flights.pl
```

Route Command

Use same example in the pdf

```
route(canakkale, X, C).
```

Route Result

```
?- route(canakkale, X, C).  
X = erzincan,  
C = 6 ;  
X = antalya,  
C = 9 ;  
X = canakkale,  
C = 12 ;  
X = izmir,  
C = 11 ;  
X = erzincan,  
C = 12 ;  
X = diyarbakir,  
C = 13 ;  
X = istanbul,  
C = 13 .
```



For your know, I have same logic mistakes in my code.



Have a nice day Sir!