1   The File `queen_attack.pl`

Use the Constraint Logic Programming over Finite Domains library.

```
:- use_module(library(clpfd)).
```

create(+Tuple)	queen_attack.pl

(Row, Col) represents a valid chessboard position.

```
create((Row, Col)) :-
```

Row and *Col* are both elements of 0..7.

```
[Row, Col] ins 0..7.
```

attack(+Tuple, +Tuple)	queen_attack.pl

A queen positioned at *(Row1, Col1)* is vulnerable to an attack by another queen positioned at *(Row2, Col2)*.

```
attack((Row1, Col1), (Row2, Col2)) :-
```

Ensure both positions are valid.

```
create((Row1, Col1)),
create((Row2, Col2)),
```

Queens in the same row can attack each other.

```
( Row1 #= Row2
```

Queens in the same column can attack each other.

```
; Col1 #= Col2
```

Queens that share the same diagonal can attack each other.

```
; abs(Row1 - Row2) #= abs(Col1 - Col2)
).
```