

## Solve 8-puzzle problem using Prolog

Output :

```
?-
% c:/Users/Prajwal/Desktop/AI Lab/Experiment - 9/lab.pl
?- ids.

start
6 1 3
4 * 5
7 2 0

left
6 1 3
* 4 5
7 2 0

up
* 1 3
6 4 5
7 2 0

right
1 * 3
6 4 5
7 2 0

down
1 4 3
6 * 5
7 2 0

right
1 4 3
6 5 *
7 2 0

down
1 4 3
6 5 0
7 2 *

left
1 4 3
6 5 0
7 * 2

left
1 4 3
6 5 0
* 7 2

up
1 4 3
* 5 0
6 7 2

right
1 4 3
5 * 0
6 7 2

right
1 4 3
5 0 *
6 7 2

down
1 4 3
5 0 *
6 7 *

left
1 4 3
5 0 *
6 * *

left
1 4 3
5 0 *
* 6 *

up
1 4 3
* 0 *
5 6 *

right
1 4 3
5 * *
6 6 *
```

```
right
1 4 3
0 2 *
5 6 7

up
1 4 *
0 2 3
5 6 7

left
1 * 4
0 2 3
5 6 7

left
* 1 4
0 2 3
5 6 7

down
0 1 4
* 2 3
5 6 7

right
0 1 4
2 * 3
5 6 7

right
0 1 4
2 3 *
5 6 7

up
0 1 *
2 3 4
5 6 7

left
0 * 1
2 3 4
5 6 7

left
* 0 1
2 3 4
5 6 7

moves = 26
true.

?- ■
```