Write a Prolog Program to print particular bird can fly or not. Incorporate required queries.

AIM

To write a Prolog program to determine whether a particular bird can fly or not.

ALGORITHM

1. Start the program.
2. Define facts for different birds.
3. Specify which birds **can fly** and which **cannot fly**.
4. Write rules to check and display whether a given bird can fly or not.
5. Load the program into the Prolog interpreter.
6. Query with can_bird_fly(Bird). to check for a particular bird.
7. Prolog will display whether the bird can fly or not.
8. Stop.

```
% Facts about birds
bird(sparrow).
bird(pigeon).
bird(eagle).
bird(penguin).
bird(ostrich).
% Rules for flight
can_fly(sparrow).
can_fly(pigeon).
can_fly(eagle).
cannot_fly(penguin).
cannot_fly(ostrich).
% Rule to check if a bird can fly
can_bird_fly(Bird) :-
    can_fly(Bird),
    write(Bird), write(' can fly.'), nl.
can_bird_fly(Bird) :-
    cannot_fly(Bird),
    write(Bird), write(' cannot fly.'), nl.
```

```
?-
% c:/Users/gayathri/Downloads/bird.pl compiled 0.00 sec, 12 clauses
?- can_bird_fly(sparrow).
sparrow can fly.
true .

?- can_bird_fly(penguin).
penguin cannot fly.
true.

?- can_fly(Bird).
Bird = sparrow ;
Bird = pigeon ;
Bird = eagle.

?- cannot_fly(Bird).
Bird = penguin ;
Bird = ostrich.

?-
```

RESULT

The program successfully determines and displays whether a given bird can fly or not.