

## Part A

You work for a company that makes a duck pond simulation game. The game can show a large variety of duck species swimming and making quacking sounds. Your task is to develop the backend (or the business logic part of the backend) component of the application.

- A duck object has a name.
- A duck object should be able to do:
  1. swim
  2. quack
  3. display: behavior for how it looks on the screen

The swim method prints '{duck name} is swimming!'

The quack method prints '{duck name} is 'Quack'

The display method prints a message about the quack looks like.

Your design must accommodate the following types of ducks:

1. Mallard
2. Redhead
3. Alabio
4. Domestic
5. Canvasback
6. Whistling
7. Rubber ducks
8. Decoy ducks

## Part B

The executives decided that flying ducks is just what the simulator needs to blow away the other duck sim competitors. And of course your manager told them it'll be no problem. "After all," said your boss, "we have an OO programmer... how hard can it be?"

Your task is to add flying functionality to ducks. The fly method prints the message '{duck name} is flying!'