

Day 2 - If-Else, Switch, Arrays and Looping

Assignment 1

Expand the airplane class with if-else statements in the methods. For loading passengers there must be no more than the maximum that can sit in the plane:

- If the amount of passengers fits, print a normal loading message
- If the amount does not fit, print a message explained how many could fit and how many could not.

Also, before taking off, first check whether the aircraft is not flying at the moment, for landing the other way around. Also print relevant messages here.

Example output:

```
Airplane ABC123 charges 33 passengers, 10 do not fit.  
Airplane ABC123 can not land, because we are still on the ground.  
Airplane ABC123 rises.  
Airplane DDD888 charges 23 passengers.  
Airplane DDD888 rises.  
Plane ABC123 lands.  
Airplane ABC123 discharges 43 passengers.  
Airplane DDD888 can not take off, because we are already flying.  
Plane DDD888 lands.  
Airplane DDD888 discharges 23 passengers.
```

Assignment 2

Create a new class with the name **Airport**, make sure it is in a relevant package (possibly the same as the Airplane). An airport has a name and an array of Airplanes. Create a constructor where three planes are created and put into the array. Make methods (with loops where necessary) for:

- Printing out all aircraft that are from the **Airport**.
- Requesting a plane that does not fly and has room for passengers.
- Loading a number of passengers in a single aircraft.

You may need to expand the class **Airplane** with features that are needed. (for example, requesting the status of flying or not)

Demonstrate creating an **Airport** with three planes, print those planes from the airport, print planes that are landed and have room for passengers and print an overload of passengers to a plane.

Example output:

```
Aircraft from airport Eindhoven:  
Airplane ABC123  
Airplane DDD888  
Plane ODL345  
Plane ABC123 requested. Is not flying, still room for 30 passengers.  
Airplane ABC123 loads 63 passengers, 33 do not fit into the plane.
```