**Task:**

Create a class hierarchy for animals in a zoo

**Requirements for the structure of the code:**

* Each animal must have its own class;
* All animals should be hierarchical to the class or interface “Animal”;
* The animal should have name and date of birth. These values ​​must be set when the object is created and can not be changed after. You need to be able to get them through getter methods.
* In the class of the animal, constants (static final) must be defined, describing the general properties of animals of this class (in what environment they live, type of food herbivore/meat-eating/omnivore, maximum weight, how much area is needed for habitation). These properties must be accessible by other classes.
* The user of the class must be able to feed the animal. For this, animals must have an "eat" method that takes the meaning of "grass", "meat". If the animal is given the type of food that it eats, then in the console you need to print "I will eat ...", otherwise print "I will not eat ..."
* It is necessary to avoid duplication of properties/actions of animals using inheritance;
* Use java collections;
* Where makes sense, use ENUM;
* It is preferable to use java 8 functions.

List of animals:

Lynx - lives on the ground, eats meat, weight up to 30 kg, needs 200 sq.m. for habitation.

Raccoon - lives on the ground, eats meat, weight up to 9 kg, needs 50 sq.m. for habitation.

Kangaroo - lives on the ground, eats plants, weight up to 85 kg, needs 300 sq.m. for habitation.

The eagle is a flying animal, eats meat, weight up to 7 kg, needs 100 sq.m. for habitation.

Ostrich - lives on the ground, eats plants, weight up to 140 kg, needs 150 sq.m. for habitation.

Carp - lives in water, eats algae and insects, weight up to 4 kg, needs 8 sq.m. for habitation.

Ram - lives in water, eats molluscs and crustaceans, weight up to 2 kg, needs 5 sq.m. for habitation.

**Calculation requirements:**

1. It is necessary to create a list in which one copy of each of the animals will be stored.

Going through the list of animals, you need:

* display all the properties of each animal on the console. For each specific animal, we display its name, date of birth, and the general properties of animals of this class;
* call the method of the animal "eat" for each animal twice (once with the string "plant", the other with the string "meat")

2. Calculate the minimum required space (sq.m.) required in the zoo, if 5 lynxes, 4 raccoons, 2 kangaroos, 7 eagles, 3 ostriches, 15 carps and 7 rams live in it. Output the result to the console.

Both points of calculation must be implemented in separate methods and called from the main method

**Optional:**

Calculate the carrying capacity of the car, which will have to transport all land animals. The same goes for flying animals. The same goes for swimming animals. Output the results to the console.