



Java 2: Midterm Exam (group A)

Question 1: Use OOP principles that you have learned so far to design and write a java program to store a group of animal objects in an array (30 Marks):

- All animal objects have 6 common methods **(6 Marks)**:
 - Parent group: Animal:
 - setAnimalName, getAnimalName;
 - setAnimalWeight, getAnimalWeight;
 - setAnimalPrice, getAnimalPrice;
- Create a class for Horse, Cow, and Sheep:
 - Add all needed variables **(3 Marks)**
 - Add all needed constructors and set animalName's default value **(5 Marks)**
 - Each class must Implement all the methods above **(3 Marks)**
- Fill in some data for the 3 objects that you have (horse, cow, sheep) (name, weight, and price) in two ways:
 - Using classes constructors **(3 Marks)**
 - Using the above setters methods **(3 Marks)**
- 6 Animal objects to be stored in the array are: horse1 + horse2, cow1 + cow2, and sheep1 + sheep2 **(4 Marks)**
- Print all animals in the array: print every animal name, weight, and price, **(3 Marks)**