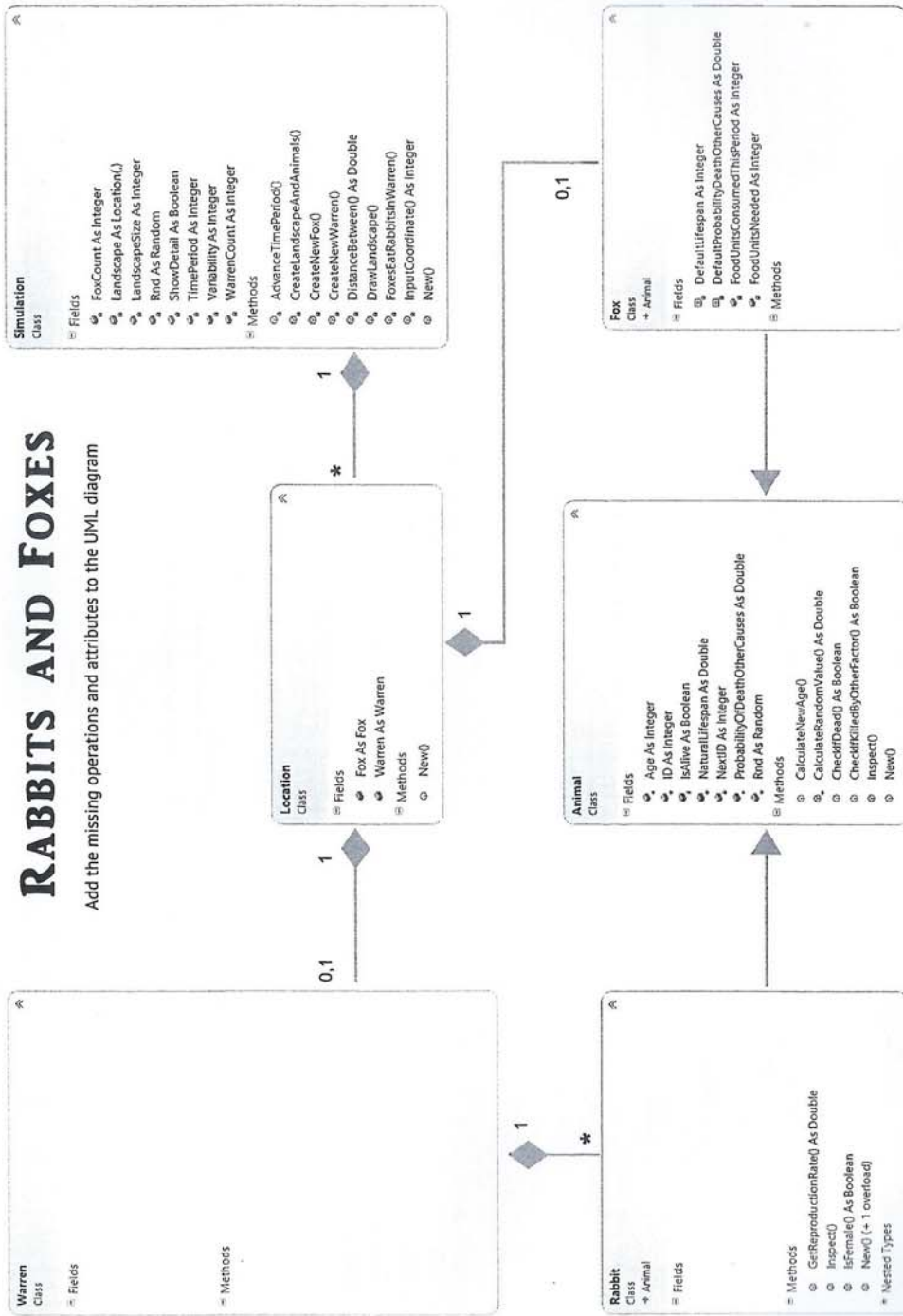


RABBITS AND FOXES

Add the missing operations and attributes to the UML diagram



Programming Theory Questions

These questions refer to the Preliminary Material and require you to load the Skeleton Program, but do not require any additional programming.

/50

- Give an example of instantiation from the skeleton program. [1 mark]

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- State the name of an identifier(s) for the following:
 - An array variable [1 mark]

.....
 - A subclass [1 mark]

.....
 - A parent class [1 mark]

.....
 - A class variable [1 mark]

.....
 - An accessor method [1 mark]

.....
 - A mutator method [1 mark]

.....
 - A variable used to store a whole number [1 mark]

.....
 - A Boolean variable [1 mark]

.....
 - Four constants that store a float [4 marks]

.....

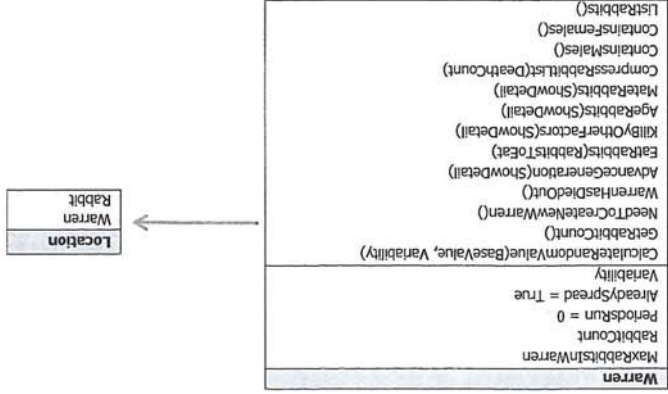
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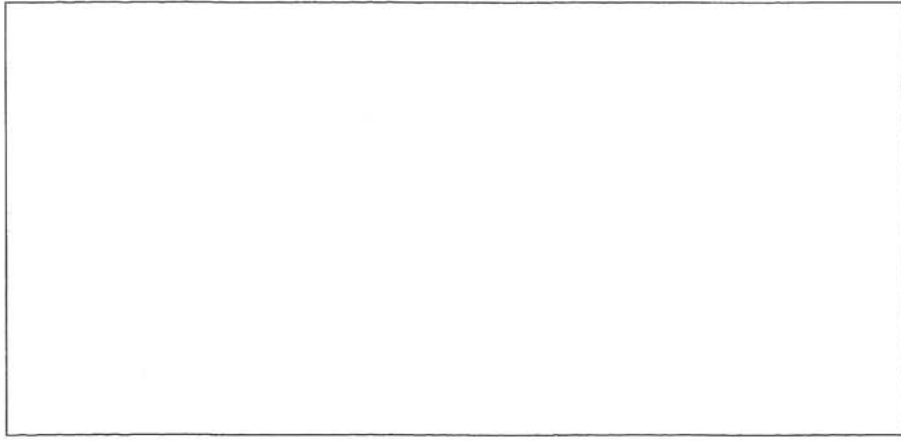
.....
- Two classes that have a composition aggregation relationship. [2 marks]

.....
 - Why is Warren to Rabbit not an example of association aggregation? [1 mark]

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14. Create a UML diagram to show the relationship between rabbits, foxes and animals. All variables and methods must be shown. [11 marks]



15. What conditions are needed for a new warren to be created? [2 marks]

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5. State the name of an identifier for a procedure or function that is overridden in a subclass. [1 mark]

6. Look at the EatRabbits subroutine in the Warren class in the skeleton program. Why does the generation of a random rabbit need to be inside a repetition structure? [1 mark]

7. Look at the Warren class. Why has a named constant been used instead of a numeric value? [2 marks]

8. State the name of an identifier for an enumerated data type. [1 mark]

9. How could the Fox class be changed to make the foxes live longer? [1 mark]

10. What is the purpose of the variable AlreadySpread in the Warren class and how is it used? [4 marks]

11. What is the purpose of the method CompressRabbitList? [2 marks]

12. Why is it necessary to store the gender of the rabbits? [2 marks]

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