Object oriented Programming

**Project 1:** Living being

**Difficulty:** EASY

**Description:** we have different species on the earth. Humans, Mammals, Reptiles etc. to keep it simple for the project sake lets pick up following categories

* Mammals
* Reptiles

Each of the above categories have following one or more actions

* isAlive() – specified whether a particular species is alive or dead
* walk() – enables species to walk
* reproduce() – enables the species to reproduce
* layEggs() – enables the species to lay eggs
* run() – enables the species to run
* sleep() – enables the species to sleep

Each of the above the categories have following parameters

* heartrate – if 0, defines the species is dead
* gender – male or female
* predator - different species which is the predator of the current species
* species\_type – currently available – dogs, tigers, elephants, tortoise, crocodiles, humans

All the species specified in the under the type belongs to either mammals or reptiles. Now create set of classes with atleast one base class containing base properties/actions and as many derived classes as you can see.