Refer to Lesson 11, "Analysis Case Study 2" slides,

1. Which pattern would you use to create the 3 zombie type on Page 17 of the AnalysisCaseStudy2 slides: Factory or Abstract Factory? Briefly justify your answer. **[5pts]**

2. Following the pattern you chose in Q1, draw a class diagram that models how you would create the three Zombie types (regular, cone, bucket zombies). For the zombies, use the same structure as presented on Page 17 of the slides. You also do **not** need to include attributes or operations for these classes. **[5pts]**

3. State the correspondences between your classes and the classes in the Factory/AbstractFactory structure diagram. For instance: Zombie - Product; ConeZombie - ConcreteProduct; etc. Then, describe the creation process of how the pattern can be used to create the zombies. **[5pts]**

4. Open question (full credits as long as you give an answer) **[5pts]**: for now we use a simple inheritance structure to represent the three types of zombies: Both ConeZombie and BucketZombie inherit from the RegularZombie.

   Note that, we know that the zombies have different amount of health: assuming that RegularZombie has 50, ConeZombie has 75, BucketZombie has 150, for instance. Can you think of another class structure to represent these three zombies? Feel free to think outside the box.

   Also, for this question, write down any sources that you have consulted for research and ideas: e.g.: google results, stackover flow pages, previous slides, etc.