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CS 162 - Assignment 3
Design Document – Class Hierarchy

Class: Character
       Behavior:
              + virtual attack(): int
              + virtual defend(): int
              + surviveDefense(): bool

Class: Goblin
       Attributes:
              - isAlive: bool
              - attackDice[]: vector <int>
              - defenseDice[]: vector <int>
              - armor[]: vector <int>
              - strength: int
       Behavior:
              + attack(): int
              + defend(): int

Class: Barbarian
       Attributes:
              - isAlive: bool
              - attackDice[]: vector <int>
              - defenseDice[]: vector <int>
              - armor[]: vector <int>
              - strength: int
       Behavior:
              + attack(): int
              + defend(): int

Class: Reptile
       Attributes:
              - isAlive: bool
              - attackDice[]: vector <int>
              - defenseDice[]: vector <int>
              - armor[]: vector <int>
              - strength: int
       Behavior:
              + attack(): int

+ defend(): int

Class: Blue
        Attributes:
                - isAlive: bool
                - attackDice[]: vector <int>
                - defenseDice[]: vector <int>
                - armor[]: vector <int>
                - strength: int
                - bluePop: int
        Behavior:
                + attack(): int
                + defend(): int

Class: Shadow
        Attributes:
                - isAlive: bool
                - attackDice[]: vector <int>
                - defenseDice[]: vector <int>
                - armor[]: vector <int>
                - strength: int
        Behavior:
                + attack(): int
                + defend(): int