**Assignment: Turn-Based Combat Game**

**Objective:**

Develop a simple terminal-based game where two characters engage in turn-based combat. Your objective is to apply Object-Oriented Programming (OOP) concepts to design and implement the game mechanics.

**Game Overview:**

The game consists of two players who take turns to attack each other. Each player starts with a predefined amount of health points (HP). The game continues in turns until one player's HP drops to 0, at which point the other player is declared the winner.

**Game Requirements:**

**Character Class:**

**Each character has the following attributes:**

name: The name of the character.

hp: Health points of the character.

attack\_power: The amount of damage a character can deal during a basic attack.

**Each character has the following methods:**

is\_alive(): Returns True if the character's hp is greater than 0, otherwise False.

attack(other): Attack another character and reduce the other character's HP based on this character's attack\_power.

take\_damage(damage): Reduces the character's HP by the damage amount.

**Mage & Warrior Classes:**

**Mage:**

Inherits from the Character class.

Has an additional attribute: spell\_power.

Has an additional method: cast\_spell(other): Casts a spell on another character to deal damage based on the spell\_power.

**Warrior:**

Inherits from the Character class.

Has an additional attribute: defend\_power.

**Has two additional methods:**

**defend():** Prepares the warrior to defend against the next attack.

Override the take\_damage(damage) method from the Character class. If the warrior is defending, reduce the damage by defend\_power for that turn.

Game Mechanics:

Implement a game loop where players take turns to either attack or use their special move.

Ask the player for their choice in each turn: (A)Attack or use (S)Special move.

Declare a winner once one player's HP reaches 0.

**Bonus:**

Add additional character classes with unique abilities.

Implement random events, like critical hits or misses.

Add a feature for players to choose their character class at the beginning of the game.

Enhance the game visuals using ASCII art or color.