SE 1105 PROGRAMMING AND PROBLEM SOLVING I

Task: Turn-Based Combat Game

You are tasked with completing the implementation of a turn-based combat game in C. The game involves two players, each taking turns to roll a dice, choose a weapon, and attack their opponent. The goal is to reduce the opponent's health to zero.

Game Mechanics:

1. Players start with full health (100).

2. Players take turns rolling a six-sided dice.

3. The player with the higher dice roll gets to choose a weapon (Knife, Gun, or Grenade).

4. The chosen weapon determines the damage inflicted on the opponent.

5. The damage can be modified based on a randomly determined hit type (Normal, Critical, Headshot).

   - Normal hit: 75% probability, no damage modification.

   - Critical hit: 20% probability, double the damage.

   - Headshot: 5% probability, instant kill.

6. The game continues until one player's health reaches zero.

Instructions:

1. Implement the **get_hit_type** function to randomly determine the hit type based on the given probabilities.

2. Modify the **attack** function to incorporate the hit type modifications:

   - Normal hit: no change to damage.

   - Critical hit: double the damage.

   - Headshot: instantly kill the opponent.

3. Complete the game loop to continue playing until one player's health is depleted.

4. Announce the winner at the end of the game.