Turn-based combat system game.

**What do we have to do?**

Create and tune a turn based combat system game that includes a player going up against a monster.

First step: Create a play game function defining the starting variables

FUNCTION play game():

Make the player health 10

Make the monster health 20

Set player armor to 2

Set monster armor to 0

Second step: Make a function that allows the player and monster to attack each other but making sure it evaluates using the armor too.

FUNCTION attack(defender armor):

Make a damage variable equal to a random integer between 1 and 3

make net damage equal to the maximum of (damage – defender armor)

RETURN net damage

Third step: create an attempt hit chance function that only allows the player and monster to hit on a certain percent of attmepts

FUNCTION attempt hit(success chance):

Return equaling True if a random number between 0 and 1 is less than success chance, otherwise equal False

Adding in a title screen/welcome text 🡪

PRINT "Welcome to toms awesome fighting game!"

PRINT "The game ends when either your health or the monster's health reaches 0."

WHILE player health > 0 AND monster health > 0:

PRINT "Press Enter to continue..."

DURING PLAYER’S TURN: Create a function that allows the player to attack successfully 50% of the time using the damage variable

Player's turn

IF attempt hit(0.5): 🡨 This makes it so it only does this 50% of the time

Equal damage to attack(monster armor)

Equal monster health to max(monster health – damage)

PRINT "You successfully hit the monster for {damage} damage."

ELSE:

PRINT "You missed your attack."

Monster's turn

IF attempt hit(0.3): 🡨 This makes it so it only does this 30% of the time

Equal damage to attack(player armor)

Equal player health to max(player health – damage)

Print "The monster successfully hit you for {damage} damage."

ELSE:

Print "The monster missed its attack."

Last steps: Create a function that checks to make sure the monster and the player are still above 0 health. Also add a restart or quit option to break the loop

Checking for end of game

IF player health <= 0:

Print "You have been defeated by the monster. Game over."

ELSE IF monster health <= 0:

Print "Congratulations! You have defeated the monster."

Restart or quit option

Print "Do you want to 'restart' the game or 'quit'?"

Input user choice

IF user choice is 'restart':

Go back to play\_game()

ELSE IF user choice is 'quit':

Print "Thank you for playing. Goodbye!"

play\_game()