Game code:

PLAYER 1 Class:

**package** com.te.game;

**public** **class** Player1 {

**private** String name;

**private** String weapon;

**private** **int** health;

**public** Player1() {

**super**();

}

**public** Player1(String name, String weapon, **int** health) {

**this**.name = name;

**this**.weapon = weapon;

**if** (health < 0 || health > 100) {

**this**.health = 100;

} **else** {

**this**.health = health;

}

}

**public** **void** damageByGun1() {

**this**.health = **this**.health - 30;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println("Got hit by gun1. Health is reduced by 30. " + "New Health is : " + **this**.health);

**if** (**this**.health == 0) {

System.***out***.println(getName() + " is dead");

}

}

**public** **void** damageByGun2() {

**this**.health = **this**.health - 50;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println("Got it by gun1. Health is reduced by 50. " + "New Health is : " + **this**.health);

**if** (**this**.health == 0) {

System.***out***.println(getName() + " is dead");

}

}

**public** **void** heal() {

**if** (**this**.health <= 0) {

System.***out***.println(getName() + " is dead. Healing not possible");

}

**else** {

**this**.health= 100;

System.***out***.println(getName() + " is healead. New Health: " + **this**.health);

}

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getWeapon() {

**return** weapon;

}

**public** **void** setWeapon(String weapon) {

**this**.weapon = weapon;

}

**public** **int** getHealth() {

**return** health;

}

**public** **void** setHealth(**int** health) {

**this**.health = health;

}

}

PLAYER 2 class

**package** com.te.game;

**public** **class** Player2 **extends** Player1 {

**private** **int** health;

**private** **boolean** armour;

**public** Player2(String name, String weapon, **int** health, **boolean** armour) {

**super**(name, weapon, health);

**this**.health = health;

**this**.armour = armour;

}

@Override

**public** **void** damageByGun1() {

**if** (armour) {

**this**.health = **this**.health - 20;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println(

"Armour is on. Got hit by gun1. Health is reduced by 20. " + "New Health is : " + **this**.health);

}

**if** (!armour) {

**this**.health = **this**.health - 30;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println(

"Armour is off. Got hit by gun1. Health is reduced by 30. " + "New Health is : " + **this**.health);

} **else** **if** (**this**.health == 0) {

System.***out***.println(getName() + " is dead");

}

}

@Override

**public** **void** damageByGun2() {

**if** (armour) {

**this**.health = **this**.health - 40;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println(

"Armour is on. Got hit by gun2. Health is reduced by 40. " + "New Health is : " + **this**.health);

}

**if** (!armour) {

**this**.health = **this**.health - 50;

**if** (**this**.health <= 0) {

**this**.health = 0;

}

System.***out***.println(

"Armour is off. Got hit by gun1. Health is reduced by 50. " + "New Health is : " + **this**.health);

} **else** **if** (**this**.health == 0) {

System.***out***.println(getName() + " is dead");

}

}

@Override

**public** **void** heal() {

**super**.heal();

}

}

MAIN CLASS:

**package** com.te.game;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Player1 player1 = **new** Player1("Suzie", "Sword", 400);

// System.out.println(player1.getName());

// System.out.println(player1.getHealth());

// System.out.println(player1.getWeapon());

player1.damageByGun1();

player1.damageByGun1();

// player1.damageByGun1();

// player1.damageByGun2();

player1.heal();

// Player2 player2 = new Player2("Sam", "Machine gun", 100, true);

// System.out.println(player2.getName());

// System.out.println(player2.getHealth());

// System.out.println(player2.getWeapon());

// player2.damageByGun1();

// player2.damageByGun1();

// player2.damageByGun2();

// player2.damageByGun2();

// player2.heal();

}

}