PASSWORD DOOR LOCK SYSTEM code

```
#include <Servo.h>

// Password configuration
const String correctPassword = "1234";
String enteredPassword = "";

// Initialize servo
Servo lockServo;
const int servoPin = 11;

// Buzzer pin
const int buzzerPin = 10;

void setup() {
  // Set up servo
  lockServo.attach(servoPin);
  lockServo.write(0); // Start with the door locked

  // Set up buzzer
  pinMode(buzzerPin, OUTPUT);

  // Start Serial Monitor
  Serial.begin(9600);
  Serial.println("Enter Password:");
}

void loop() {
  if (Serial.available() > 0) {
    char input = Serial.read(); // Read the input from Serial Monitor

    if (input == '\r' || input == '\n') {
      // When the user presses "Enter", check the entered password

      if (enteredPassword == correctPassword) {
        Serial.println("Access Granted");
        unlockDoor();
        delay(3000); // Keep the door unlocked for 3 seconds
        lockDoor();
        enteredPassword = ""; // Reset password after successful entry
        Serial.println("Enter Password:");
```

```
      } else {
        Serial.println("Access Denied");
        tone(buzzerPin, 1000, 500); // Buzzer sound for access denied
        delay(2000); // Wait for 2 seconds
        enteredPassword = ""; // Reset the entered password
        Serial.println("Enter Password:");
      }
    } else if (input == 8) { // Handle backspace (ASCII 8)
      if (enteredPassword.length() > 0) {
        enteredPassword.remove(enteredPassword.length() - 1);
        Serial.print("\b \b"); // Backspace in Serial Monitor
      }
    } else {
      // Append the entered character to the password string
      enteredPassword += input;
      Serial.print(input); // Print the character typed in the Serial Monitor
    }
  }
}

void unlockDoor() {
  lockServo.write(90); // Unlock the door (servo angle 90 degrees)
}

void lockDoor() {
  lockServo.write(0); // Lock the door (servo angle 0 degrees)
}
```