FUNCTION verifyCredentials(username, password)  
BEGIN  
    IF username IS EMPTY OR LENGTH(username) < 3 THEN  
        RETURN "Username must be at least 3 characters long"  
    END IF  
  
    IF password IS EMPTY OR LENGTH(password) < 6 THEN  
        RETURN "Password must be at least 6 characters long"  
    END IF

    SET dbConnection TO connectToDatabase()  
    SET query TO "SELECT password FROM users WHERE username = username"  
    SET queryResult TO dbConnection.executeQuery(query)

    IF queryResult IS NOT EMPTY THEN  
        IF hash(password) = queryResult.password THEN  
            RETURN "Login successful"  
        ELSE  
            RETURN "Incorrect password"  
        END IF  
    ELSE  
        RETURN "Username not found"  
    END IF

    dbConnection.close()  
END FUNCTION

FUNCTION login(username, password)

BEGIN

IF username IS EMPTY OR LENGTH(username) < 3 THEN

SEND TO DISPLAY "Username must be at least 3 characters long"

RETURN

END IF

IF password IS EMPTY OR LENGTH(password) < 6 THEN

SEND TO DISPLAY "Password must be at least 6 characters long"

RETURN

END IF

SET dbConnection TO connectToDatabase()

SET query TO "SELECT password FROM users WHERE username = username"

SET queryResult TO dbConnection.executeQuery(query)

IF queryResult IS NOT EMPTY THEN

IF hash(password) = queryResult.password THEN

SEND TO DISPLAY "Login successful"

ELSE

SEND TO DISPLAY "Incorrect password"

END IF

ELSE

SEND TO DISPLAY "Username not found"

END IF

dbConnection.close()

END FUNCTION

FUNCTION register(username, password)

BEGIN

IF username IS EMPTY OR LENGTH(username) < 3 THEN

SEND TO DISPLAY "Username must be at least 3 characters long"

RETURN

END IF

IF password IS EMPTY OR LENGTH(password) < 6 THEN

SEND TO DISPLAY "Password must be at least 6 characters long"

RETURN

END IF

SET dbConnection TO connectToDatabase()

SET checkQuery TO "SELECT username FROM users WHERE username = username"

SET checkResult TO dbConnection.executeQuery(checkQuery)

IF checkResult IS EMPTY THEN

SET insertQuery TO "INSERT INTO users (username, password) VALUES (username, hash(password))"

dbConnection.executeUpdate(insertQuery)

SEND TO DISPLAY "Registration successful"

ELSE

SEND TO DISPLAY "Username already exists"

END IF

dbConnection.close()

END FUNCTION

**Gibjohn psuedo**

FUNCTION completeQuiz(userId, quizAnswers)

BEGIN

IF quizAnswers IS EMPTY THEN

SEND TO DISPLAY "No answers submitted"

RETURN

END IF

SET dbConnection TO connectToDatabase()

SET score TO calculateScore(quizAnswers)

SET insertQuery TO "INSERT INTO quiz\_results (userId, score) VALUES (userId, score)"

dbConnection.executeUpdate(insertQuery)

SEND TO DISPLAY "Quiz completed. Your score: " + score

dbConnection.close()

END FUNCTION