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Module Leader : Mr. Sudarshana Welihinda

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Student ID & Name : 20210243 - Himashi Kodithuwakku

I. Executive Summary

Hangman is a single-player game. This game is based on a console python program. The codes are written in the python programming language. This program should be run in the console.

II. Acknowledgment

Initially, we are grateful to the dedicated management of IIT for successfully arranging the Foundation program for us, thereby creating such a wonderful environment for us to learn both measurable and general skills followed by the honorable guidance of all lecturers.

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Also, we would like to thank Ms. Keerthiga Rajenthiram and Ms.Tharushi, our lecturers for sparing their precious time to us give feedback on our activities and doubts.

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1. Problem specification

1.1 Description of problem

Create a console python 3. x program which will allow the users to demonstrate the single-player game called “Hangman”. This game should be provided guess words with empty spaces. Players will have limited turns for guesses. Turns should be equal to the given guess word letters. The player can win the game by correctly guessing words given limited turns. Players information should be record in database or game.

2. Solution (Python program codes)

2.1 package called Hangman: - Hangman.py – Main program

A package called by Hangman, main program name also Hangman. In the main program 4 modules.

import modules

import Categories.cate1

import Categories.cate2

import Categories.cate3

import Categories.cate4

print ("\nWelcome to guessing game")

display categories

print ("\nSelect Category")

print ("\n(1) - Sports\n(2) - Animals\n(3) - Countries\n(4) - Fruits")

get category number from player

cat = **int** (**input** ("\nEnter Category number:"))

display according to player select category relevant words

if cat == 1:

Categories.cate1.cat_1()

elif cat == 2:

Categories.cate2.cat_2()

elif cat == 3:

Categories.cate3.cat_3()

```
elif cat == 4:
```

```
Categories.cate4.cat_4()
```

2.2 Subfolder called Categories (it has four modules)

2.2.1. Module 1 – cate1.py

```
# category 1 Sports
```

```
# each category has 5 rounds
```

```
def cat_1():
```

```
    "Store guessing words, if player select category 1 display category relevant guessing words"
```

```
    sports = [ "golf", "cricket", "football", "karate", "basketball" ]
```

```
    animals = [ "dog", "giraffe", "elephant", "snake", "parrot" ]
```

```
    countries = [ "canada", "srilanka", "newzeland", "korea", "england" ]
```

```
    fruits = [ "pear", "apple", "watermelon", "orange", "dragonfruit" ]
```

```
# connect database
```

```
    import mysql.connector
```

```
    import random
```

```
# open hangman database connection using dictionary
```

```
conDict = { "host": "localhost" ,
```

```
            "database" : "Hangman" ,
```

```
            "user" : "root" ,
```

```
            "password" : "" } 
```

```
db = mysql.connector.connect ( **conDict )
```

```
# prepare a cursor object using cursor () method
```



```

    cursor = db.cursor ()

# create variables

gword = 0
total_w = 0
total_l = 0
total_wins = 0
total_loses = 0
p_name = 0
player = 0


# get player name and assign player number
p_name = input ( "Enter Your name:" )
p_no = random.randrange (1,1000)


# each category has five rounds

while gword < 5:
    guesses = ""

# randomly display guess word

    rand = random.shuffle(sports)
    word = sports[1]
    lens = len(word)
    turns = lens

```

Display hint

```
if lens == 4:
```

```
    print ( "\nHINT :Very popular among rich people" )
```

```
elif lens == 6:
```

```
    print ( "\nHINT: One of the martial arts" )
```

```
elif lens == 7:
```

```
    print ( "\nHINT :England's national sport" )
```

```
elif lens == 8:
```

```
    print ( "\nHINT : A sport that uses legs" )
```

```
elif lens == 10:
```

```
    print ( "\nHINT :Tallest players can easily score in this game" )
```

Display spaces according to word

```
if lens == 4:  
    for letter in word:  
        print ( " _ " ,end = "" )
```

```
elif lens == 6:  
    for letter in word:  
        print ( " _ " ,end = "" )
```

```
elif lens == 7:  
    for letter in word:  
        print ( " _ " , end = "" )
```

```
elif lens == 8:  
    for letter in word:  
        print ( " _ " , end = "" )
```

```
elif lens == 10:  
    for letter in word:  
        print ( " _ " , end = "" )
```

Get Guessing letter from player

```
while turns > 0:
```

```
    print ( "\n" )
```

```
    guess = input ( " enter guess letter : " )
```

```
    print ( "\n" )
```

```
    if guess in word:
```

```
        print ( "\t" , "you have" ,turns, "left" )
```

```
    else:
```

```
        turns -= 1
```

```
        print ( "\t" , "you guessed wrong you have" , turns, "left" )
```

```
guesses = guesses + guess
```

```
wrongletter = 0
```

```
for letter in word :
```

```
    if letter in guesses:
```

```
        print ( " ", letter , " ",end = "" )
```

```
    else:
```

```
        print ( " _ " ,end = "" )
```

```
        wrongletter += 1
```

#If player gussed correct word display win

```
if wrongletter == 0:
    print ( "\t" , "Congratulations! guess word is : " ,word, "\n" , "You Won !" )
    total_w += 1
    print ( "\nTOTAL OF WINS:" ,total_w )
    gword+=1
    print ( "\nTOTAL ROUNDS:" ,gword )
```

read player info

```
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

break

else:

```
print ( "\t" , "You Lose!" , "\n" , "you can try again" )
total_l +=1
print ( "\nTOTAL OF LOSES:" ,total_l )
gword+=1
print ( "\nTOTAL ROUNDS:" ,gword )
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

```
# execute sql query method() input data to table
```

```
mySQLtext = "INSERT INTO records VALUES (%s,%s,%s,%s)"
```

```
myValues= (p_no,p_name,total_wins,total_loses)
```

```
cursor.execute(mySQLtext,myValues)
```

```
# Commit the change
```

```
db.commit()
```

```
print (cursor.rowcount, "Record Added" )
```

```
# disconnect from server
```

```
db.close()
```

2.2.2. Module 2 – cate2.py

category 2 Animals

each category has 5 rounds

def cat_2():

"Store guessing words, if player select category 1 display category relevant guessing words"

sports = ["golf" , "cricket" , "football" , "karate" , "basketball"]

animals = ["dog" , "giraffe" , "elephant" , "snake" , "parrot"]

countries = ["canada" , "srilanka" , "newzeland" , "korea" , "england"]

fruits = ["pear" , "apple" , "watermelon" , "orange" , "dragonfruit"]

connect database

import mysql.connector

import random

open hangman database connection using dictionary

conDict = { "host" : "localhost" ,

"database" : "Hangman" ,

"user" : "root" ,

"password" : "" }

db = mysql.connector.connect(**conDict)

prepare a cursor object using cursor() method

cursor = db.cursor()

create variables

```
gword = 0
total_w = 0
total_l = 0
total_wins = 0
total_loses = 0
p_name = 0
player = 0
```

get player name and assign player number

```
p_name = input ( "Enter Your name:" )
p_no = random.randrange(1,1000)
```

each category has five rounds

```
while gword < 5:
    guesses = ""
```

randomly display guess word

```
rand = random.shuffle(animals)
word = animals[1]
lens = len (word)
turns = lens
```


Display hint

```
if lens == 3:
```

```
    print ( "\nHINT :It is  the most popular pet globally" )
```

```
elif lens == 5:
```

```
    print ( "\nHINT :An animal that has a long, thin body and no arms and legs " )
```

```
elif lens == 7:
```

```
    print ( "\nHINT :A tall african animal that has extremely long legs" )
```

```
elif lens == 8:
```

```
    print ( "\nHINT :It is a huge typically gray mammal " )
```

```
elif lens == 6:
```

```
    print ( "\nHINT :That animal can imitates human words" )
```

Display spaces according to word

```
if lens == 3:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 5:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 7:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 8:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 6:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

Get Guessing letter from player

```
while turns > 0:
    print ( "\n" )
    guess = input ( " enter guess letter :")
    print ( "\n" )

    if guess in word:
        print ( "\t" , "you have" ,turns, "left" )
    else:
        turns -= 1
        print ( "\t" , "you guessed wrong you have" ,turns, "left" )

guesses = guesses + guess
wrongletter = 0

for letter in word :
    if letter in guesses:
        print ( " " , letter , " " ,end= "" )
    else:
        print ( " _ " ,end= "" )
    wrongletter+=1
```

#If player gussed correct word display win

```
if wrongletter == 0:
    print ( "\t" , "Congratulations! guess word is : " ,word, "\n" , "You Won !" )
    total_w += 1
    print ( "\nTOTAL OF WINS:" ,total_w )
    gword+=1
    print ( "\nTOTAL ROUNDS:" ,gword )
```

read player info

```
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

break

else:

```
print ( "\t" , "You Lose!" , "\n" , "you can try again" )
total_l +=1
print ( "\nTOTAL OF LOSES:" ,total_l )
gword+=1
print ( "\nTOTAL ROUNDS:" ,gword )
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

```
# execute sql query method() input data to table
```

```
mySQLtext = "INSERT INTO records VALUES (%s,%s,%s,%s)"
```

```
myValues= (p_no,p_name,total_wins,total_loses)
```

```
cursor.execute(mySQLtext,myValues)
```

```
# Commit the change
```

```
db.commit()
```

```
print (cursor.rowcount, "Record Added" )
```

```
# disconnect from server
```

```
db.close()
```

2.2.3. Module 3 – cate3.py

category 3 Countries

each category has 5 rounds

def cat_3():

"Store guessing words, if player select category 3 display category relevant guessing words"

sports = ["golf" , "cricket" , "football" , "karate" , "basketball"]

animals = ["dog " , "giraffe" , "elephant" , "snake" , "parrot"]

countries = ["canada" , "srilanka" , "newzeland" , "korea" , "england"]

fruits = ["pear" , "apple" , "watermelon" , "orange" , "dragonfruit"]

connect database

import mysql.connector

import random

open hangman database connection using dictionary

conDict = { "host" : "localhost" ,

"database" : "Hangman" ,

"user" : "root" ,

"password" : "" }

db = mysql.connector.connect(**conDict)

prepare a cursor object using cursor() method

cursor = db.cursor()

create variables

```
gword = 0
total_w = 0
total_l = 0
total_wins = 0
total_loses = 0
p_name = 0
player = 0
```

get player name and assign player number

```
p_name = input ( "Enter Your name:" )
p_no = random.randrange(1,1000)
```

each category has five rounds

```
while gword < 5:
    guesses = ""
```

randomly display guess word

```
rand = random.shuffle(countries)
word = countries[1]
lens = len (word)
turns = lens
```

Display hint

```
if lens == 6:
```

```
    print ( "\nHINT :This country is famous for ice hockey" )
```

```
elif lens == 8:
```

```
    print ( "\nHINT :It has the eighth wonder of the world " )
```

```
elif lens == 9:
```

```
    print ( "\nHINT :this country 2021 T20 World cup Runners-up" )
```

```
elif lens == 5:
```

```
    print ( "\nHINT :Since 1945 it has been divided between two countries" )
```

```
elif lens == 7:
```

```
    print ( "\nHINT :The largest division of the united kingdom" )
```


Display spaces according to word

```
if lens == 6:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 8:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 9:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 5:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

```
elif lens == 7:  
    for letter in word:  
        print ( " _ " ,end= "" )
```

Get Guessing letter from player

```
while turns > 0:
    print ( "\n" )
    guess = input ( " enter guess letter :")
    print( "\n" )

    if guess in word:
        print ( "\t" , "you have" , turns, "left" )
    else:
        turns -= 1
        print ( "\t" , "you guessed wrong you have " ,turns, "left" )

guesses = guesses + guess
wrongletter = 0

for letter in word :
    if letter in guesses:
        print ( " " ,letter, " " ,end= "" )
    else:
        print( " _ " ,end= "" )
    wrongletter+=1
```

#If player gussed correct word display win

```
if wrongletter == 0:
    print( "\t" , "Congratulations! guess word is : " ,word, "\n" , "You Won !" )
    total_w += 1
    print ( "TOTAL OF WINS:" ,total_w )
    gword+=1
    print ( "\nTOTAL ROUNDS:" ,gword )
```

read player info

```
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

break

else:

```
print( "\t" , "You Lose!" , "\n" , "you can try again" )
total_l +=1
print ( "\nTOTAL OF LOSES:" ,total_l )
gword+=1
print ( "\nTOTAL ROUNDS:" ,gword )
player = p_name
total_wins = total_w
total_loses = total_l
print ( "\n" )
```

```
# execute sql query method() input data to table
```

```
mySQLtext = "INSERT INTO records VALUES (%s,%s,%s,%s)"
```

```
myValues= (p_no,p_name,total_wins,total_loses)
```

```
cursor.execute(mySQLtext,myValues)
```

```
# Commit the change
```

```
db.commit()
```

```
print (cursor.rowcount, "Record Added" )
```

```
# disconnect from server
```

```
db.close()
```

2.2.4. Module 4 – cate4.py

category 4 Fruits

each category has 5 rounds

def cat_4():

"Store guessing words, if player select category 4 display category relevant guessing words"

sports = ["golf" , "cricket" , "football" , "karate" , "basketball"]

animals = ["dog" , "giraffe" , "elephant" , "snake" , "parrot"]

countries = ["canada" , "srilanka" , "newzeland" , "korea" , "england"]

fruits = ["pear" , "apple" , "watermelon" , "orange" , "dragonfruit"]

connect database

import mysql.connector

import random

open hangman database connection using dictionary

```
conDict = { "host" : "localhost" ,  
            " database" : "Hangman" ,  
            " user" : "root" ,  
            "password" : "" }
```

db = mysql.connector.connect(**conDict)

prepare a cursor object using cursor() method

cursor = db.cursor()

create variables

```
gword = 0
total_w = 0
total_l = 0
total_wins = 0
total_loses = 0
p_name = 0
player = 0
```

get player name and assign player number

```
p_name = input( "Enter Your name:" )
p_no = random.randrange(1,1000)
```

each category has five rounds

```
while gword < 5:
    guesses = ""
```

randomly display guess word

```
rand = random.shuffle(fruits)
word = fruits[1]
lens = len (word)
turns = lens
```

Display hint

```
if lens == 4:
```

```
    print ( "\nHINT :A fruit with pale green or brownish skin" )
```

```
elif lens == 5:
```

```
    print ( "\nHINT :Sir Aisek Newton found a law look at this tree " )
```

```
elif lens == 6:
```

```
    print ( "\nHINT :A color between red and yellow that is like the color of fire" )
```

```
elif lens == 10:
```

```
    print ( "\nHINT :A large ,round fruit that has green skin and inside red " )
```

```
elif lens == 11:
```

```
    print ( "\nHINT :It known as strawberry pear, and it has unique look" )
```

Display spaces according to word

```
if lens == 4:
    for letter in word:
        print ( " _ ",end="")

elif lens == 5:
    for letter in word:
        print ( " _ ",end="")

elif lens == 6:
    for letter in word:
        print ( " _ " ,end= "" )

elif lens == 10:
    for letter in word:
        print ( " _ " , end= "" )

elif lens == 11:
    for letter in word:
        print ( " _ " ,end= "" )
```


Get Guessing letter from player

```
while turns > 0:
```

```
    print ( "\n" )
```

```
    guess = input ( " enter guess letter :")
```

```
    print ( "\n" )
```

```
    if guess in word:
```

```
        print ( "\t" , "you have" ,turns, "left" )
```

```
    else:
```

```
        turns -= 1
```

```
        print ( "\t" , "you guessed wrong you have" ,turns, "left" )
```

```
guesses = guesses + guess
```

```
wrongletter = 0
```

```
for letter in word :
```

```
    if letter in guesses:
```

```
        print ( " " ,letter, " " ,end="" )
```

```
    else:
```

```
        print( " _ " ,end= "" )
```

```
        wrongletter+=1
```

#If player guessed correct word display win

```
if wrongletter == 0:
    print ( "\t" , "Congratulations! guess word is : " ,word, "\n" , "You Won !" )
    total_w += 1
    print ( "\nTOTAL OF WINS:" ,total_w )
    gword+=1
    print ( "\nTOTAL ROUNDS:" ,gword )
```

read player info

```
    player = p_name
    total_wins = total_w
    total_loses = total_l
    print ( "\n" )

    break

else:
    print ( "\t" , "You Lose!" , "\n" , "you can try again" )
    total_l +=1
    print ( "\nTOTAL OF LOSES:" ,total_l )
    gword+=1
    print ( "\nTOTAL ROUNDS:" ,gword )
    player = p_name
    total_wins = total_w
    total_loses = total_l
    print ( "\n" )
```

```
# execute sql query method() input data to table
```

```
mySQLtext = "INSERT INTO records VALUES (%s,%s,%s,%s)"
```

```
myValues= (p_no,p_name,total_wins,total_loses)
```

```
cursor.execute(mySQLtext,myValues)
```

```
# Commit the change
```

```
db.commit()
```

```
print (cursor.rowcount , "Record Added" )
```

```
# disconnect from server
```

```
db.close()
```

3. Create a database and database table with python codes

3.1. Create database folder has two modules

3.1.1 Module 1 - db.py (create database)

```
# create database
```

```
import mysql.connector
```

```
# open database connection
```

```
db = mysql.connector.connect( host = "localhost", user = "root", password = "")
```

```
# prepre a cursor object using cursor() method
```

```
cursor = db.cursor()
```

```
# execute sql query using execute() method
```

```
cursor.execute ("CREATE DATABASE Hangman")
```

```
# disconnect from server
```

```
db.close()
```

3.2 Create a database table with python codes

3.2.1. Module 2 – table.py (create table)

create table

```
import mysql.connector
```

open database connection

```
db = mysql.connector.connect( host = "localhost" ,database = "Hangman" ,user = "root" ,  
password = "" )
```

#prepre a cursor object using cursor() method

```
cursor = db.cursor()
```

#execute sql query using execute() method

```
cursor.execute("CREATE TABLE records (playerNo INT(4), playerName  
VARCHAR(20),totalOfwins INT(2),totalOfloses INT(2))")
```

disconnect from server

```
db.close()
```

4. Test cases

3.1. Test case 1

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19043.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\SubashiniAthapaththu>cd C:\Users\SubashiniAthapaththu\Desktop\Hangman

C:\Users\SubashiniAthapaththu\Desktop\Hangman>py hangman.py

Welcome to guessing game

Select Category

(1) - Sports
(2) - Animals
(3) - Countries
(4) - Fruits

Enter Category number:1
Enter Your name:Himashi

HINT : A sport that uses legs
- - - - -
enter guess letter :f

      you have 8 left
f - - - - -
enter guess letter :o

      you have 8 left
f o o - - - -
enter guess letter :t

      you have 8 left
f o o t - - - -
enter guess letter :b

      you have 8 left
f o o t b - - -
enter guess letter :a

      you have 8 left
f o o t b a - -
enter guess letter :l

      you have 8 left
f o o t b a l l
You Won !

TOTAL OF WINS: 1
TOTAL ROUNDS: 1

HINT :Tallest players can easily score in this game
- - - - -
```

Figure 1 Test case 1.1 (console)

```
C:\WINDOWS\system32\cmd.exe

HINT :Tallest players can easily score in this game
- - - - -
enter guess letter :b

      you have 10 left
b - - - - - b - - -
enter guess letter :a

      you have 10 left
b a - - - - b a - -
enter guess letter :s

      you have 10 left
b a s - - - b a - -
enter guess letter :k

      you have 10 left
b a s k - - b a - -
enter guess letter :e

      you have 10 left
b a s k e - b a - -
enter guess letter :t

      you have 10 left
b a s k e t b a - -
enter guess letter :l

      you have 10 left
b a s k e t b a l l
You Won !

TOTAL OF WINS: 2

TOTAL ROUNDS: 2

HINT: One of the martial arts
- - - - -
enter guess letter :k

      you have 6 left
k - - - - -
enter guess letter :a

      you have 6 left
k a - - a - -
enter guess letter :r

      you have 6 left
k a r a - -
enter guess letter :t

      you have 6 left
k a r a t -
enter guess letter :e

      you have 6 left
k a r a t e
You Won !

TOTAL OF WINS: 3
```

Figure 2 Test case 1.2 (console)

C:\WINDOWS\system32\cmd.exe
k a r a t _
enter guess letter :e
you have 6 left
k a r a t e Congratulations! guess word is : karate
You Won !
TOTAL OF WINS: 3
TOTAL ROUNDS: 3
HINT :England's national sport
_ _ _ _ _
enter guess letter :c
you have 7 left
c _ _ c _ _
enter guess letter :r
you have 7 left
c r _ c _ _
enter guess letter :i
you have 7 left
c r i c _ _
enter guess letter :k
you have 7 left
c r i c k _ _
enter guess letter :e
you have 7 left
c r i c k e _
enter guess letter :t

C:\WINDOWS\system32\cmd.exe
you have 7 left
c r i c k _ _
enter guess letter :e
you have 7 left
c r i c k e _
enter guess letter :t
you have 7 left
c r i c k e t Congratulations! guess word is : cricket
You Won !
TOTAL OF WINS: 4
TOTAL ROUNDS: 4
HINT: One of the martial arts
_ _ _ _ _
enter guess letter :k
you have 6 left
k _ _ _ _
enter guess letter :a
you have 6 left
k a _ a _ _
enter guess letter :r
you have 6 left
k a r a _ _
enter guess letter :t
you have 6 left
k a r a t _

Figure 3 Test case 1.3 (console)

C:\WINDOWS\system32\cmd.exe
you have 7 left
c r i c k e t Congratulations! guess word is : cricket
You Won !
TOTAL OF WINS: 4
TOTAL ROUNDS: 4
HINT: One of the martial arts
_ _ _ _ _
enter guess letter :k
you have 6 left
k _ _ _ _
enter guess letter :a
you have 6 left
k a _ a _ _
enter guess letter :r
you have 6 left
k a r a _ _
enter guess letter :t
you have 6 left
k a r a t _
enter guess letter :e
you have 6 left
k a r a t e Congratulations! guess word is : karate
You Won !
TOTAL OF WINS: 5
TOTAL ROUNDS: 5

Figure 4 Test case 1.4 (console)

3.2. Test case 2

<pre>C:\WINDOWS\system32\cmd.exe Microsoft Windows [Version 10.0.19043.1348] (c) Microsoft Corporation. All rights reserved. C:\Users\SubashiniAthapaththu>cd C:\Users\SubashiniAthapaththu\Desktop\Hangman C:\Users\SubashiniAthapaththu\Desktop\Hangman>py hangman.py Welcome to guessing game Select Category (1) - Sports (2) - Animals (3) - Countries (4) - Fruits Enter Category number:2 Enter Your name:Chathushka HINT :That animal can imitates human words - - - - - enter guess letter :p you have 6 left p - - - - - enter guess letter :a you have 6 left p a - - - - - enter guess letter :r you have 6 left p a r r - - - enter guess letter :o you have 6 left p a r r o _ _</pre>	<pre>C:\WINDOWS\system32\cmd.exe enter guess letter :o you have 6 left p a r r o _ _ enter guess letter :t you have 6 left p a r r o t Congratulations! guess word is : parrot You Won ! TOTAL OF WINS: 1 TOTAL ROUNDS: 1 HINT :That animal can imitates human words - - - - - enter guess letter :p you have 6 left p - - - - - enter guess letter :y you guessed wrong you have 5 left p - - - - - enter guess letter :u you guessed wrong you have 4 left p - - - - - enter guess letter :k you guessed wrong you have 3 left p - - - - -</pre>
---	---

Figure 5 Test case 2.1 (console)

<pre>C:\WINDOWS\system32\cmd.exe you guessed wrong you have 4 left p - - - - - enter guess letter :k you guessed wrong you have 3 left p - - - - - enter guess letter :w you guessed wrong you have 2 left p - - - - - enter guess letter :e you guessed wrong you have 1 left p - - - - - enter guess letter :a you have 1 left p a - - - - - enter guess letter :w you guessed wrong you have 0 left p a _ _ _ _ _ You Lose! you can try again TOTAL OF LOSES: 1 TOTAL ROUNDS: 2 HINT :An animal that has a long, thin body and no arms and legs - - - - - enter guess letter :s</pre>	<pre>C:\WINDOWS\system32\cmd.exe HINT :An animal that has a long, thin body and no arms and legs - - - - - enter guess letter :s you have 5 left s - - - - - enter guess letter :n you have 5 left s n - - - - - enter guess letter :k you have 5 left s n _ k _ _ enter guess letter :e you have 5 left s n _ k e enter guess letter :t you guessed wrong you have 4 left s n _ k e enter guess letter :i you guessed wrong you have 3 left s n _ k e enter guess letter :w you guessed wrong you have 2 left s n _ k e</pre>
--	--

Figure 6 Test case 2.2 (console)


```

C:\WINDOWS\system32\cmd.exe
enter guess letter :w

s _ _ _ k _ e
you guessed wrong you have 2 left

enter guess letter :e

s _ _ _ k _ e
you have 2 left

enter guess letter :w

s _ _ _ k _ e
you guessed wrong you have 1 left

enter guess letter :q

s _ _ _ k _ e
you guessed wrong you have 0 left
You Lose!
you can try again

TOTAL OF LOSES: 2
TOTAL ROUNDS: 3

HINT :It is the most popular pet globally
_ _ _

enter guess letter :d

d _ _
you have 3 left

enter guess letter :o

d o _
you have 3 left

C:\WINDOWS\system32\cmd.exe
d _ _
enter guess letter :o

d o _
you have 3 left

enter guess letter :g

d o _ g
you have 3 left
Congratulations! guess word is : dog
You Won !

TOTAL OF WINS: 2
TOTAL ROUNDS: 4

HINT :It is a huge typically gray mammal.
_ _ _ _ _

enter guess letter :e

e _ _ _ _
you have 8 left

enter guess letter :l

e l _ _ _ _
you have 8 left

enter guess letter :p

e l _ e p _ _ _
you have 8 left

enter guess letter :h

e l _ e p _ _ _ h _ _ _
you have 8 left

```

Figure 7 Test case 2.3 (console)

```

C:\WINDOWS\system32\cmd.exe
e l _ e p _ _ _
you have 8 left

enter guess letter :h

e l _ e p h _ _ _
you have 8 left

enter guess letter :a

e l _ e p h a _ _
you have 8 left

enter guess letter :n

e l _ e p h a n _
you have 8 left

enter guess letter :t

e l _ e p h a n t
you have 8 left
Congratulations! guess word is : elephant
You Won !

TOTAL OF WINS: 3
TOTAL ROUNDS: 5

1 Record Added
C:\Users\SubashiniAthapaththu\Desktop\Hangman>

```

Figure 8 Test case 2.4 (console)

3.3. Test case 3

Display players records information store in database

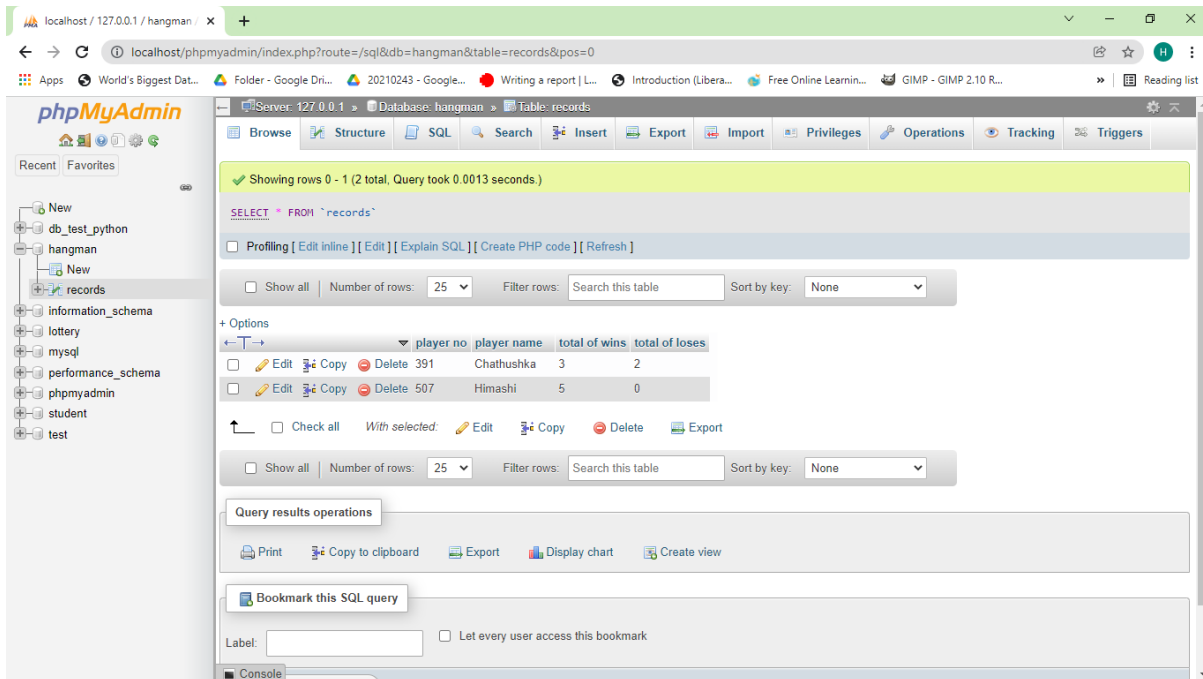


Figure 9 Test case 3.1 (database)

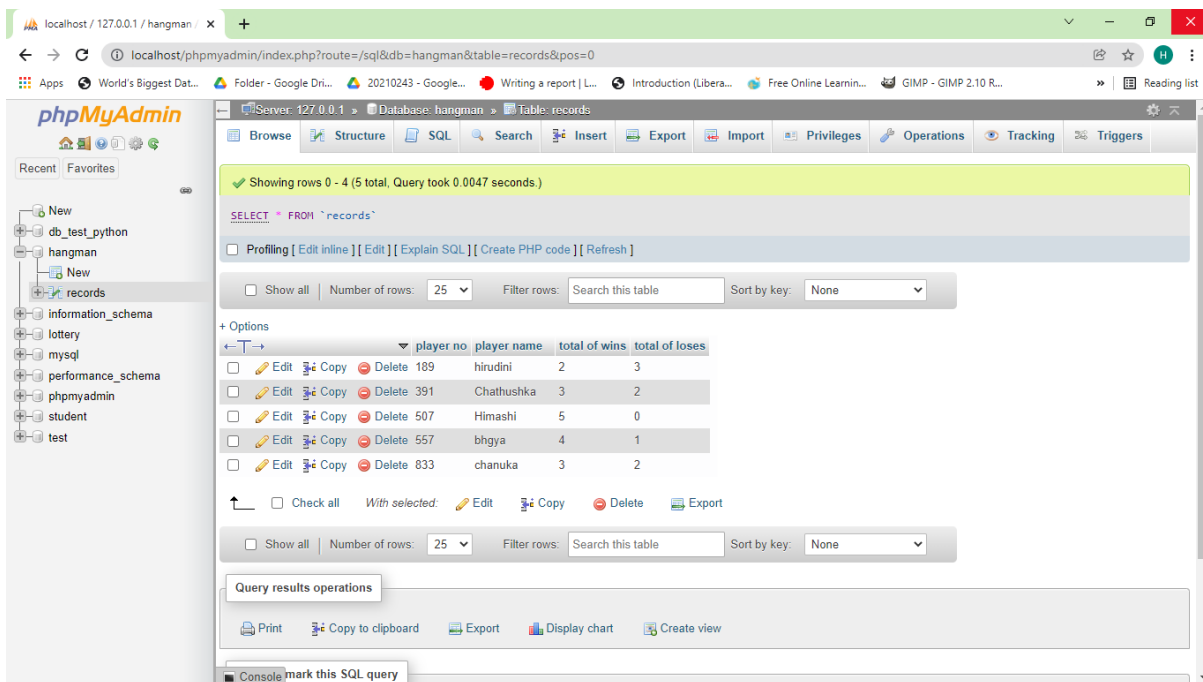


Figure 10 Test case 3.2 (database)

V. Conclusion

How to create a single-player game with the python program. Hangman is a package. It has two subfolders. One folder includes four modules. And another folder has two modules. They are creating a database and a table for storing game records.