INDEX

* INDEX...…………………………..1
* ACKNOWLEDGEMENT....2
* INTRODUCTION...........3-4
* ALGORITHM..................5-6
* CODING..………………….7-26
* OUTPUT………………....27-37
* BIBLIOGRAPHY ..……….38

ACKNOWLEDGEMENT

I would like to express my gratitude to everyone that contributed to the creation of this project. First I would like to thank God for all his blessings. I would also like to thank my **Principal, ma’am Sunitha** and **Vice Principal , ma’am Annie** for giving me such a wonderful environment to learn. I particularly appreciate my **Computer Science teacher, ma’am Sreepadma** for her constant support and guidance throughout my educational journey through the world of Computer Science. I would like to thank my **parents and friends** for their constant support, advice and testing our program. Last but not least, I would like to thank my **fellow group members** for making this project a special labour of love and passion that led to many a sleepless night.

INTRODUCTION

The user enters a casino with a certain amount of money with which he/she can choose to play multiple games as long as he/she would like to.

The user will use a **text-based** menu to navigate the casino

The users name and money at entry and exit will be stored in a **mysql database.** This database is also used to remember returning users.

The games will be defined in separate **user-defined functions** and will have a **text file** associated with it (with the rules of each game) that will be displayed at the start of any game

At the end of every session the user will be presented with a **bar graph** showing the net worth of the various individuals that have been to the casino compared to their own.

***Salient features***

* ***Mysql database connectivity***
* ***Text file utilization***
* ***Matplotlib implementation***
* ***Use of random module***
* ***Use of time module***
* ***Use of sys module***
* ***Use of time module***

ALGORITHM

* **def dice\_roll():**

This function is used in the craps game extensively and rolls a die for the user

* **craps(bet):**

This function contains the game of craps and has one required parameter that stores the amount the amount the player has bet on this game.

* **input\_bet():**

This function takes the value that the player is betting and checks whether it is an invalid value or not.(i.e. less than zero value or a value higher than player worth)

* **hit(li,ten,player\_card,player\_carddis):**

This function is used extensively in the blackjack game to apply a ‘hit’(blackjack term).The various parameters enable the game of blackjack as they hold the required lists for the game to continue.

* **wingame():**

This function is used to print a celebratory screen for the user if he/she wins a game

* **losegame():**

This function is used to print a consolatory screen for the user if he/she loses a game

* **drawgame():**

This function is used to print a consolatory screen for the user if he/she draws.

* **maingame(bet):**

This function contains the game of blackjack and has one required parameter that stores the amount the amount the player has bet on this game.

* **slotmachine(bet):**

This function contains a slot machine and has one required parameter that stores the amount the amount the player has bet on this game.

* **\_\_main\_\_():**

The main program which establishes the mysql connectivity and helps the user navigate the casino with a text based menu. A loading message is printed first as the modules required take a few moments to import. It also draws the bar graphs at the end of the program.

CODING

print("kindly wait while everything is set up for you. . .","\n")

#importing modules

import random

import mysql.connector as cn

import sys

import time

import matplotlib.pyplot as plt

#defining functions

def dice\_roll(): #craps function

dice\_rolled=random.randint(2,12)

return dice\_rolled

def craps(bet): #craps function

ans\_to\_repeat\_round='y'

while ans\_to\_repeat\_round=='y':

print("We will be starting a new round")

ans\_shooter\_or\_not=input("Do you want to be the shooter? y/n: ")

if ans\_shooter\_or\_not=='y':

print("You are the shooter. To start the game, select (type in) any 2 of these 5 dice.")

dice\_list=['Dice1', 'Dice2', 'Dice3', 'Dice4', 'Dice5']

dice\_choice=[]

for p in range(2):

dice=input(dice\_list)

dice\_list.remove(dice)

dice\_choice.append(dice)

print('The dice the shooter has chosen are',dice\_choice)

print("The shooter now chooses if they want to bet on the:\n1. Pass Line\n2. Don't Pass Line")

comeout\_bet=int(input("Enter 1 or 2 depending on your betting choice: "))

bet\_placed=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed

if comeout\_bet==1:

print("You are betting",bet\_placed," on the Pass Line")

print("The shooter is rolling the come-out roll!")

comeout\_roll=dice\_roll()

print("The shooter has rolled a",comeout\_roll)

if comeout\_roll==7 or comeout\_roll==11:

print("The crowd cheers as the come-out roll wins!")

print("You have won",bet\_placed\*3,'$. ',end='')

bet=bet+(bet\_placed\*3)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [2,3,12]:

print("The crowd boos as the come-out roll loses!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [4,5,6,8,9,10]:

print("The shooter's point is now",comeout\_roll)

print("Now the aim of the game is to land your point before you roll a 7 OR 11")

c=1

while c>=1:

j=dice\_roll()

dice\_rolled\_in\_round=j

print()

ans\_to\_more\_bets=input("Do you want to place a single roll bet? y/n: ")

if ans\_to\_more\_bets=='y':

print("Choose any one single roll bet you would like to make: ")

print("1. Three (Ace Deuce)- Payout=15:1")

print("2. Any 7 (Big Red)- Payout=4:1")

print("3. Any Craps (Three way)- Payout=7:1")

print("4. Two Craps or Aces (Snake Eyes)- Payout=30:1")

print("5. Twelve Craps (Boxcars or Midnight)- Payout=30:1")

print("6. Field Bet- Payout=2:1")

single\_roll\_bet\_option=int(input("Enter option number of whichever bet you prefer: "))

bet\_placed\_sr=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed\_sr

for i in range(1):

print("The number rolled by the shooter (for single roll bet) is ",dice\_rolled\_in\_round)

if single\_roll\_bet\_option==1:

if dice\_rolled\_in\_round==3:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*15,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==2:

if dice\_rolled\_in\_round==7:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*4,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==3:

if dice\_rolled\_in\_round in [2,3,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*7,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==4:

if dice\_rolled\_in\_round==2:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==5:

if dice\_rolled\_in\_round==12:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==6:

if dice\_rolled\_in\_round in [2,3,4,9,10,11,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*2,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

else:

pass

print("The number rolled by the shooter (for main Line bet) is",dice\_rolled\_in\_round)

if dice\_rolled\_in\_round in [7,11]:

print("The crowd moans as the bettors who played for Pass Line have lost!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round==comeout\_roll:

print("The crowd bursts in cheers as the bettors who played the Pass Line have won!")

print("You have won",bet\_placed\*2,'$. ',end='')

bet=bet+(bet\_placed\*2)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round in [2,3,4,5,6,8,9,10,12]:

print("The crowd waits in anticipation for the next roll")

continue

if comeout\_bet==2:

print("You are betting",bet\_placed," on the Don't Pass Line")

print("The shooter is rolling the come-out roll!")

comeout\_roll=dice\_roll()

print("The shooter has rolled a",comeout\_roll)

if comeout\_roll==7 or comeout\_roll==11:

print("The crowd moans as the come-out roll loses!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [2,3,12]:

print("The crowd cheers as the come-out roll win!")

print("You have won",bet\_placed\*3,'$. ',end='')

bet=bet+(bet\_placed\*3)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [4,5,6,8,9,10]:

print("The shooter's point is now",comeout\_roll)

print("Now the aim of the game is to land a 7 or 11 before the shooter lands his point")

c=1

while c>=1:

j=dice\_roll()

dice\_rolled\_in\_round=j

print()

ans\_to\_more\_bets=input("Do you want to place a single roll bet? y/n: ")

if ans\_to\_more\_bets=='y':

print("Choose any one single roll bet you would like to make: ")

print("1. Three (Ace Deuce)- Payout=15:1")

print("2. Any 7 (Big Red)- Payout=4:1")

print("3. Any Craps (Three way)- Payout=7:1")

print("4. Two Craps or Aces (Snake Eyes)- Payout=30:1")

print("5. Twelve Craps (Boxcars or Midnight)- Payout=30:1")

print("6. Field Bet- Payout=2:1")

single\_roll\_bet\_option=int(input("Enter option number of whichever bet you prefer: "))

bet\_placed\_sr=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed\_sr

for i in range(1):

print("The number rolled by the shooter (for single roll bet) is ",dice\_rolled\_in\_round)

if single\_roll\_bet\_option==1:

if dice\_rolled\_in\_round==3:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*15,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==2:

if dice\_rolled\_in\_round==7:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*4,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==3:

if dice\_rolled\_in\_round in [2,3,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*7,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==4:

if dice\_rolled\_in\_round==2:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==5:

if dice\_rolled\_in\_round==12:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

print("You now have",bet)

elif single\_roll\_bet\_option==6:

if dice\_rolled\_in\_round in [2,3,4,9,10,11,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*2,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

else:

pass

print("The number rolled by the shooter (for main Line bet) is",dice\_rolled\_in\_round)

if dice\_rolled\_in\_round in [7,11]:

print("The crowd cheers as the bettors who played for Don't Pass Line have won!")

print("You have won",bet\_placed\*2,'$. ',end='')

bet=bet+(bet\_placed\*2)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round==comeout\_roll:

print("The crowd moans as the bettors who played the Don't Pass Line have lost!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round in [2,3,4,5,6,8,9,10,12]:

print("The crowd waits in anticipation for the next roll")

continue

elif ans\_shooter\_or\_not=='n':

print("The player now chooses if they want to bet on the:\n1. Pass Line\n2. Don't Pass Line")

comeout\_bet=int(input("Enter 1 or 2 depending on your betting choice: "))

bet\_placed=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed

if comeout\_bet==1:

print("You are betting",bet\_placed," on the Pass Line")

print("The shooter is rolling the come-out roll!")

comeout\_roll=dice\_roll()

print("The shooter has rolled a",comeout\_roll)

if comeout\_roll==7 or comeout\_roll==11:

print("The crowd cheers as the come-out roll wins!")

print("You have won",bet\_placed\*3,'$. ',end='')

bet=bet+(bet\_placed\*3)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [2,3,12]:

print("The crowd boos as the come-out roll loses!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [4,5,6,8,9,10]:

print("The shooter's point is now",comeout\_roll)

print("Now the aim of the game is for the shoooter to land point before he/she rolls a 7 OR 11")

c=1

while c>=1:

j=dice\_roll()

dice\_rolled\_in\_round=j

print()

ans\_to\_more\_bets=input("Do you want to place a single roll bet? y/n: ")

if ans\_to\_more\_bets=='y':

print("Choose any one single roll bet you would like to make: ")

print("1. Three (Ace Deuce)- Payout=15:1")

print("2. Any 7 (Big Red)- Payout=4:1")

print("3. Any Craps (Three way)- Payout=7:1")

print("4. Two Craps or Aces (Snake Eyes)- Payout=30:1")

print("5. Twelve Craps (Boxcars or Midnight)- Payout=30:1")

print("6. Field Bet- Payout=2:1")

single\_roll\_bet\_option=int(input("Enter option number of whichever bet you prefer: "))

bet\_placed\_sr=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed\_sr

for i in range(1):

print("The number rolled by the shooter (for single roll bet) is ",dice\_rolled\_in\_round)

if single\_roll\_bet\_option==1:

if dice\_rolled\_in\_round==3:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*15,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==2:

if dice\_rolled\_in\_round==7:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*4,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==3:

if dice\_rolled\_in\_round in [2,3,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*7,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==4:

if dice\_rolled\_in\_round==2:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==5:

if dice\_rolled\_in\_round==12:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==6:

if dice\_rolled\_in\_round in [2,3,4,9,10,11,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*2,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

else:

pass

print("The number rolled by the shooter (for main Line bet) is",dice\_rolled\_in\_round)

if dice\_rolled\_in\_round in [7,11]:

print("The crowd moans as the bettors who played for Pass Line have lost!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round==comeout\_roll:

print("The crowd bursts in cheers as the bettors who played the Pass Line have won!")

print("You have won",bet\_placed\*2,'$. ',end='')

bet=bet+(bet\_placed\*2)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round in [2,3,4,5,6,8,9,10,12]:

print("The crowd waits in anticipation for the next roll")

continue

if comeout\_bet==2:

print("You are betting",bet\_placed," on the Don't Pass Line")

print("The shooter is rolling the come-out roll!")

comeout\_roll=dice\_roll()

print("The shooter has rolled a",comeout\_roll)

if comeout\_roll==7 or comeout\_roll==11:

print("The crowd moans as the come-out roll loses!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [2,3,12]:

print("The crowd cheers as the come-out roll wins!")

print("You have won",bet\_placed\*3,'$. ',end='')

bet=bet+(bet\_placed\*3)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

continue

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

break

elif comeout\_roll in [4,5,6,8,9,10]:

print("The shooter's point is now",comeout\_roll)

print("Now the aim of the game is to land a 7 or 11 before the shooter lands his point")

c=1

while c>=1:

j=dice\_roll()

dice\_rolled\_in\_round=j

print()

ans\_to\_more\_bets=input("Do you want to place a single roll bet? y/n: ")

if ans\_to\_more\_bets=='y':

print("Choose any one single roll bet you would like to make: ")

print("1. Three (Ace Deuce)- Payout=15:1")

print("2. Any 7 (Big Red)- Payout=4:1")

print("3. Any Craps (Three way)- Payout=7:1")

print("4. Two Craps or Aces (Snake Eyes)- Payout=30:1")

print("5. Twelve Craps (Boxcars or Midnight)- Payout=30:1")

print("6. Field Bet- Payout=2:1")

single\_roll\_bet\_option=int(input("Enter option number of whichever bet you prefer: "))

bet\_placed\_sr=int(input("Enter amount you would like to bet (increments of 5$, min bet is 5$): "))

bet=bet-bet\_placed\_sr

for i in range(1):

print("The number rolled by the shooter (for single roll bet) is ",dice\_rolled\_in\_round)

if single\_roll\_bet\_option==1:

if dice\_rolled\_in\_round==3:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*15,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==2:

if dice\_rolled\_in\_round==7:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*4,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==3:

if dice\_rolled\_in\_round in [2,3,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*7,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==4:

if dice\_rolled\_in\_round==2:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

print("You now have",bet)

elif single\_roll\_bet\_option==5:

if dice\_rolled\_in\_round==12:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*30,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

elif single\_roll\_bet\_option==6:

if dice\_rolled\_in\_round in [2,3,4,9,10,11,12]:

print("You have won this single roll bet! Congrats")

print("You have won",bet\_placed\_sr\*2,'$. ',end='')

bet=bet+bet\_placed\_sr

print("You now have",bet)

else:

print("You have lost this single roll bet!")

print("You have lost",bet\_placed\_sr,'$. ',end='')

else:

pass

print("The number rolled by the shooter (for main Line bet) is",dice\_rolled\_in\_round)

if dice\_rolled\_in\_round in [7,11]:

print("The crowd cheers as the bettors who played for Don't Pass Line have won!")

print("You have won",bet\_placed\*2,'$. ',end='')

bet=bet+(bet\_placed\*2)

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round==comeout\_roll:

print("The crowd moans as the bettors who played the Don't Pass Line have lost!")

print("You have lost",bet\_placed,'$. ',end='')

print("You now have",bet,"$")

print("The round is now over")

ans\_to\_repeat\_round=input("Would you like to play another round? y/n: ")

if ans\_to\_repeat\_round=='y':

print()

break

else:

print("Thank you for playing. The total money you are leaving with is",bet,". Goodbye!")

return(bet)

elif dice\_rolled\_in\_round in [2,3,4,5,6,8,9,10,12]:

print("The crowd waits in anticipation for the next roll")

continue

def input\_bet(): #function to place bet

global plyr\_mny

while True:

try:

print()

x=int(input("how much are you betting for this game?"))

if x<=plyr\_mny and x>0:

break

else:

plyr\_mny=int(1/0)

except:

print()

print("INVALID VALUE. Please enter a positive integer value that is less than or equal to ",plyr\_mny,'\n')

plyr\_mny-=x

return(x)

def hit(li,ten,player\_card,player\_carddis): #blackjack function

li=[1,2,3,4,5,6,7,8,9,10]

ten=[10,'King','Queen','Jack','Ace']

import random

cards=random.choice(li)

if cards==10:

num=random.choice(ten)

player\_carddis.append(num)

player\_card.append(10)

else:

player\_card.append(cards)

player\_carddis.append(cards)

print('your cards are :-')

for i in player\_carddis:

print('|',i,end=' |')

print()

print()

def wingame(): #blackjack function

print()

print('You have won the game')

print()

winfile=open('win.txt','r')

lines=winfile.read()

print(lines)

winfile.close()

print()

def losegame(): #blackjack function

print()

print('The dealer has won the game')

print()

print()

losefile=open('lose.txt','r')

lines=losefile.read()

print(lines)

losefile.close()

print()

def drawgame(): #blackjack function

print()

print('The game is a draw')

print()

drawfile=open('draw.txt','r')

lines=drawfile.read()

print(lines)

drawfile.close()

print()

def maingame(bet): #blackjack function

#Prints the rules

rulz=open('rules.txt','r')

sent=rulz.read()

print(sent)

rulz.close()

print()

print()

dealamt=random.choice([10000,12000,15000,4000,7000,9000,13000,14000,16000,17000,18000,19000,20000])

print()

print('The Dealer has bet Rs.',dealamt)

print()

player\_card=[]

player\_carddis=[]

li=[1,2,3,4,5,6,7,8,9,10]

ten=[10,'King','Queen','Jack','Ace']

for i in range(2):

cards=random.choice(li)

if cards==10:

num=random.choice(ten)

player\_carddis.append(num)

player\_card.append(10)

else:

player\_card.append(cards)

player\_carddis.append(cards)

print('Your cards are:-')

for i in player\_carddis:

print('|',i,end=' |')

#The main menu driven program

op='opt'

gamesum=0

while op!=2:

print('''

You have three options which are

1)Hit

2)Stay

''')

op=int(input("Enter the option number:-" ))

if op==1:

gamesum=0

hit(li,ten,player\_card,player\_carddis)

length=len(player\_card)

for i in range(0,length):

gamesum+=player\_card[i]

if gamesum==21:

break

if gamesum>21:

break

elif op==2:

break

else:

print()

print('!!!INVALID OPTION!!!')

print("Staying!!!")

print()

sum1=0

length=len(player\_card)

for i in range(0,length):

sum1+=player\_card[i]

print('The sum of your original cards is:- ',sum1)

print()

sum2=random.choice([16,17,18,19,20,21,22,23,24,25,26])

print('The total of dealers card is:- ',sum2)

print()

lose=0

win=0

draw=0

if sum1>21 and sum2>21:

draw=1

if sum1<=21 and sum2>21:

win=1

if sum1<=21 and sum2<21:

lose=1

if sum1>21 and sum2<=21:

lose=1

if sum1<21 and sum2<21:

if sum1>sum2:

win=1

if sum1==sum2:

draw=1

if sum1<sum2:

lose=1

if draw==1:

print()

result=bet

print('YOU DID NOT LOSE ANY MONEY')

print()

return result

if win==1:

wingame()

print()

print('YOU HAVE GAINED RS.',bet+dealamt)

result=bet+dealamt

print()

return result

if lose==1:

losegame()

print('YOU HAVE LOST RS.',bet)

result=0

print()

print()

return result

def slotmachine(bet):

#printing rules

prizes=open("explanation.txt")

for i in prizes:

print(i,end='')

time.sleep(1)

prizes.close()

#spinning slot machine

print("time to spin the slot machine")

print()

ml=['( )','777','###','@.@','.!.','O.O','|||','<$>','^\_^']

r1=[];r2=[];r3=[]

for i in range(3):

r1.append(random.choice(ml))

r2.append(random.choice(ml))

r3.append(random.choice(ml))

#printing slot machine

time.sleep(1)

print('| ',end='')

for i in r1:

print(i,' | ',end='')

time.sleep(1)

print()

print()

print('| ',end='')

for i in r2:

print(i,' | ',end='')

time.sleep(1)

print()

print()

print('| ',end='')

for i in r3:

print(i,' | ',end='')

print()

print()

#checking win conditions row +200 col +300 cross +500 all +1000

print('CHECKING FOR WIN CONDITIONS...')

print()

time.sleep(2)

win=False

allwin=True

#row wins

if r1[0]==r1[1]==r1[2]:

bet+=100

win=True

else:

allwin=False

if r2[0]==r2[1]==r2[2]:

bet+=100

win=True

else:

allwin=False

if r3[0]==r3[1]==r3[2]:

bet+=100

win=True

else:

allwin=False

#column wins

if r1[0]==r2[0]==r3[0]:

bet+=200

win=True

if r1[1]==r2[1]==r3[1]:

bet+=200

win=True

if r1[2]==r2[2]==r3[2]:

bet+=200

win=True

#cross wins

if r1[0]==r2[1]==r3[2]:

bet+=500

win=True

if r1[2]==r2[1]==r3[0]:

bet+=500

win=True

if allwin:

bet+=1000

if win==False:

bet=0

#returning money

if win==True:

print('YOU HAVE WON ',bet,' FROM THE SLOT MACHINE (ᵔᴥᵔ)')

else:

print("YOU LOSE. BETTER LUCK NEXT TIME")

return bet

#MAIN PROGRAM

#setting up mysql table

while True:

try:

p123=input("Enter your mysql password.")

conn=cn.connect(host='localhost',user='root',password=p123,database='')

break

except:

print("The password entered is incorrect")

cur=conn.cursor()

try:

cur.execute('create database if not exists casino;')

cur.execute("use casino;")

cur.execute('create table if not exists playerdata(NAME varchar(30) primary key,MONEY int);')

conn.commit()

except:

conn=cn.connect(host='localhost',user='root',password='mysql',database='casino')

cur=conn.cursor()

print("WELCOME TO THE CASINO",'\n')

time.sleep(1)

#player introduction

plyr\_nam=input("What is your name?").upper()

time.sleep(1)

while True:

try:

print()

plyr\_mny=int(input("How much money do you want to convert to chips?"))

if plyr\_mny>=0:

break

else:

plyr\_mny=int(1/0)

except:

print("INVALID VALUE. Please enter a positive integer value",'\n')

print()

st="select \* from playerdata where name='"+plyr\_nam+"';"

cur.execute(st)

if cur.fetchall()==[]:

time.sleep(1)

print('Ahh a new player. We appreciate your visit','\n')

time.sleep(1)

cur.execute("insert into playerdata values('"+plyr\_nam+"',"+str(plyr\_mny)+");")

conn.commit()

else:

time.sleep(1)

print("Ahh welcome back. We've missed you",'\n')

time.sleep(1)

cur.execute("update playerdata set money="+str(plyr\_mny)+" where name='"+plyr\_nam+"';")

conn.commit()

#menu driven game selection

mnu='bruh'

while mnu!=4:

while True: #error handling block

try:

mnu=int(input("""What do you wanna play?

Enter 1-Blackjack

2-Slot Machine

3-Craps Table

4-Exit the Casino"""))

if mnu==1 or mnu==2 or mnu==3 or mnu==4:

break

else:

mnu=int(1/0)

except:

print("INVALID VALUE. Please a valid option number",'\n')

if mnu==1:

amt\_won=maingame(input\_bet())

plyr\_mny+=amt\_won

cur.execute("update playerdata set money="+str(plyr\_mny)+" where name='"+plyr\_nam+"';")

conn.commit()

elif mnu==2:

amt\_won=slotmachine(input\_bet())

plyr\_mny+=amt\_won

cur.execute("update playerdata set money="+str(plyr\_mny)+" where name='"+plyr\_nam+"';")

conn.commit()

elif mnu==3:

print("Welcome to Craps, the game based on probability and the luck of a dice throw")

print("This game unites all those taking part in it, because the goal is common and is achieved in the same manner by everyone.")

print("The goal being making money!")

print()

instruct=input("Do you want to see the instructions on how to play the game? y/n: ")

if instruct=='y':

prizes=open("craps\_instruct.txt")

for i in prizes:

print(i,end='')

time.sleep(1)

prizes.close()

print()

else:

print("Let's get on with the game then shall we!\n")

amt\_won=craps(input\_bet())

plyr\_mny+=amt\_won

cur.execute("update playerdata set money="+str(plyr\_mny)+" where name='"+plyr\_nam+"';")

conn.commit()

elif mnu==4:

print("You're leaving. . . :(")

print("Here's some player statistics before you leave",'\n')

#matplotlib usage

time.sleep(3)

cur.execute("select \* from playerdata;")

plyrnms=[]

plyrmny=[]

for i in cur.fetchall():

plyrnms+=[i[0]]

plyrmny+=[i[1]]

plt.bar(plyrnms,plyrmny,color='red')

plt.xlabel("PLAYER NAME")

plt.ylabel("PLAYER WORTH")

plt.title("PLAYER STATISTICS")

plt.show()

print("Hope you visit again")

sys.exit(0)

TEXT FILES USED

* **craps\_instruct.txt**

Here are the instructions for the game, CRAPS!

a new round of craps begins the following takes place:

1) The shooter selects two dice to roll.

2) The shooter must make a Pass Line bet – either on the Pass or Don't Pass line (we’ll soon go through what that means). Other players at the table also make bets.

3) The shooter begins the round by rolling the dice off the opposite wall of the table. The shooter's first roll is known as the come-out roll.

As we said, the shooter has to make either a Pass bet or a Don’t Pass bet before the first roll – the come-out roll. If the come-out roll is a 7 or 11, then the Pass bet wins and the Don't Pass bets lose. This scenario ends the round. If the come-out roll is a 2, 3 or 12, also known as “craps,” the pass line loses and the don't pass line either wins This also ends the round.

If the come-out roll is a 4, 5, 6, 8, 9 or 10, then that specific number becomes the player's point. The dealers at the table then place a puck on top of that specific number on the table. The shooter continues to roll the dice until he or she rolls the point number 7. If the point number is rolled, then Pass line bettors win and Don't Pass bettors lose. If a 7 is rolled, Pass line bets lose and Don't Pass bets win.

Pass Line: Pass line bets are the easiest craps bets to make. When you wager on the pass line, you are betting that either a 7 or an 11 will be the result of the come-out roll. If a shooter rolls a 7 or 11 on the come-out roll, you double your money.

If the shooter rolls a 4, 5, 6, 8, 9 or 10 instead, then a point is established. When you bet the Pass line, you want that point number to be rolled again, (before the shooter rolls a 7). If the shooter does hit the number before rolling a 7, your Pass line bet is doubled.

If the shooter rolls a 2, 3 or 12 (or craps) on the come-out roll, then you lose your Pass line bet. If a point is established and a 7 is rolled before that point value, this also results in a lost Pass line bet.

Don't Pass Line: Don't Pass bets are the opposite of Pass line bets. When you make a Don't Pass bet you are basically betting against the shooter. You want the shooter to crap out (roll a 2, 3 or 12) on the come-out roll. If a point is established on the come-out roll, then your goal as a Don't Pass bettor is to have the shooter roll a 7 before hitting their established number.

SINGLE ROLL BETS:

Three (Ace Deuce): Wins if the shooter rolls a 3 and pays 15 to 1.

Any 7 (Big Red): Wins if the shooter rolls a 7 and pays 4 to 1.

Any Craps (Three way): Wins if the shooter rolls a 2, 3 or 12 and pays 7 to 1 for each number.

Two Craps or Aces (Snake Eyes): Wins if the shooter rolls a 2 and pays 30 to 1.

Twelve Craps (Boxcars or Midnight): Wins if the shooter rolls a 12 and pays 30 to 1.

Field Bets : Wins if the shooter rolls either a 2,3,4,9,10, 11or 12. The 3,4,9,10 and 11 pay even money, and for a 2 or a 12 the payout is 2 to 1.

* **draw.txt (ASCII art)**

/$$$$$$$ /$$$$$$$ /$$$$$$ /$$ /$$ /$$ /$$ /$$

| $$\_\_ $$| $$\_\_ $$ /$$\_\_ $$| $$ /$ | $$ | $$| $$| $$

| $$ \ $$| $$ \ $$| $$ \ $$| $$ /$$$| $$ | $$| $$| $$

| $$ | $$| $$$$$$$/| $$$$$$$$| $$/$$ $$ $$ | $$| $$| $$

| $$ | $$| $$\_\_ $$| $$\_\_ $$| $$$$\_ $$$$ |\_\_/|\_\_/|\_\_/

| $$ | $$| $$ \ $$| $$ | $$| $$$/ \ $$$

| $$$$$$$/| $$ | $$| $$ | $$| $$/ \ $$ /$$ /$$ /$$

|\_\_\_\_\_\_\_/ |\_\_/ |\_\_/|\_\_/ |\_\_/|\_\_/ \\_\_/ |\_\_/|\_\_/|\_\_/

* **explanation.txt**

// You are now in the slot machine portion of this casino \\

The symbols of the slot machine are

- ( ) - 777 - ### - @.@ - .!. - O.O - ||| - <$> - ^\_^ -

If you get the same symbol thrice in a row you win 200

If you get the same symbol thrice in a column you win 300

If you get the same symbol thrice in a diagonal line you win 500

If you get the same symbol in every position you win 1000

* **lose.txt (ASCII art)**

$$\ $$\ $$$$$$\ $$\ $$\ $$\ $$$$$$\ $$$$$$\ $$$$$$$$\

\$$\ $$ |$$ \_\_$$\ $$ | $$ | $$ | $$ \_\_$$\ $$ \_\_$$\ $$ \_\_\_\_\_|

\$$\ $$ / $$ / $$ |$$ | $$ | $$ | $$ / $$ |$$ / \\_\_|$$ |

\$$$$ / $$ | $$ |$$ | $$ | $$ | $$ | $$ |\$$$$$$\ $$$$$\

\$$ / $$ | $$ |$$ | $$ | $$ | $$ | $$ | \\_\_\_\_$$\ $$ \_\_|

$$ | $$ | $$ |$$ | $$ | $$ | $$ | $$ |$$\ $$ |$$ |

$$ | $$$$$$ |\$$$$$$ | $$$$$$$$\ $$$$$$ |\$$$$$$ |$$$$$$$$\

\\_\_| \\_\_\_\_\_\_/ \\_\_\_\_\_\_/ \\_\_\_\_\_\_\_\_|\\_\_\_\_\_\_/ \\_\_\_\_\_\_/ \\_\_\_\_\_\_\_\_|

===========================================================================================

$$$$$$\ $$$$$$\ $$\ $$\ $$$$$$$$\ $$$$$$\ $$\ $$\ $$$$$$$$\ $$$$$$$\

$$ \_\_$$\ $$ \_\_$$\ $$$\ $$$ |$$ \_\_\_\_\_| $$ \_\_$$\ $$ | $$ |$$ \_\_\_\_\_|$$ \_\_$$\

$$ / \\_\_|$$ / $$ |$$$$\ $$$$ |$$ | $$ / $$ |$$ | $$ |$$ | $$ | $$ |

$$ |$$$$\ $$$$$$$$ |$$\$$\$$ $$ |$$$$$\ $$ | $$ |\$$\ $$ |$$$$$\ $$$$$$$ |

$$ |\\_$$ |$$ \_\_$$ |$$ \$$$ $$ |$$ \_\_| $$ | $$ | \$$\$$ / $$ \_\_| $$ \_\_$$<

$$ | $$ |$$ | $$ |$$ |\$ /$$ |$$ | $$ | $$ | \$$$ / $$ | $$ | $$ |

\$$$$$$ |$$ | $$ |$$ | \\_/ $$ |$$$$$$$$\ $$$$$$ | \$ / $$$$$$$$\ $$ | $$ |

\\_\_\_\_\_\_/ \\_\_| \\_\_|\\_\_| \\_\_|\\_\_\_\_\_\_\_\_| \\_\_\_\_\_\_/ \\_/ \\_\_\_\_\_\_\_\_|\\_\_| \\_\_|

* **rules.txt**

BLACKJACK

The following are the rules of the game:-

\*You are dealt two cards and so is the dealer

\*If you want you can hit which means adding another card to your arsenal

\*If you dont want any more cards you can stay which means stay out of the round

\*The goal of the game is to get 21 as the sum of your cards

MAY THE ODDS BE EVER IN YOUR FAVOUR!!!

* **win.txt (ASCII art)**

$$\ $$\ $$$$$$\ $$\ $$\ $$\ $$\ $$$$$$\ $$\ $$\ $$\ $$\ $$\

\$$\ $$ |$$ \_\_$$\ $$ | $$ | $$ | $\ $$ |$$ \_\_$$\ $$$\ $$ | $$ |$$ |$$ |

\$$ $$ / $$ / $$ |$$ | $$ | $$ |$$$\ $$ |$$ / $$ |$$$$\ $$ | $$ |$$ |$$ |

\$$$$ / $$ | $$ |$$ | $$ | $$ $$ $$\$$ |$$ | $$ |$$ $$\$$ | $$ |$$ |$$ |

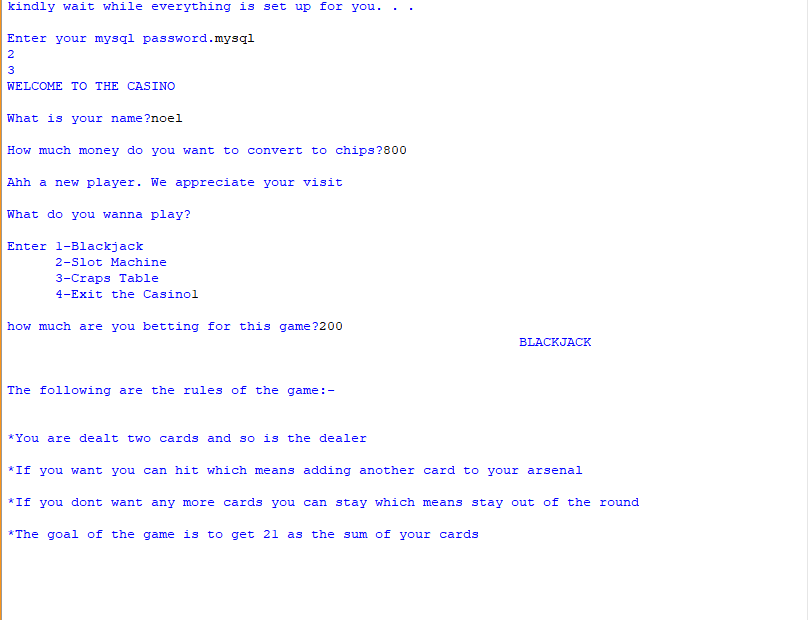
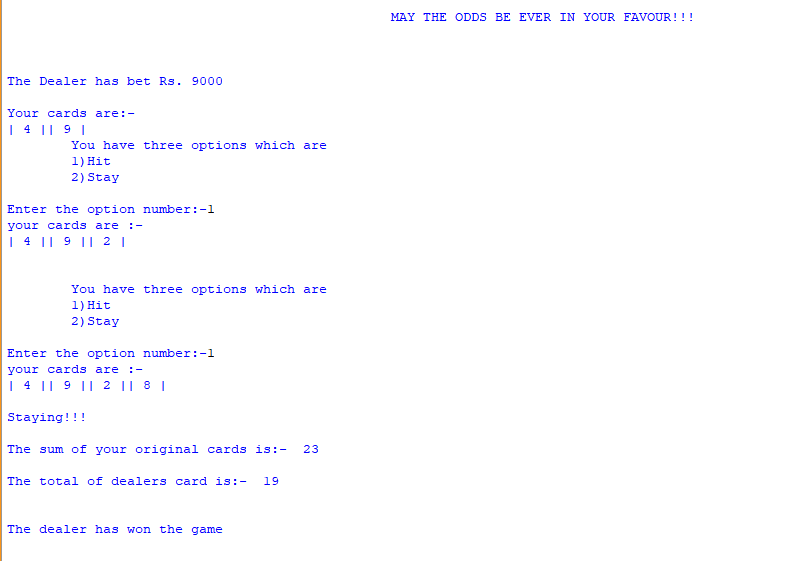
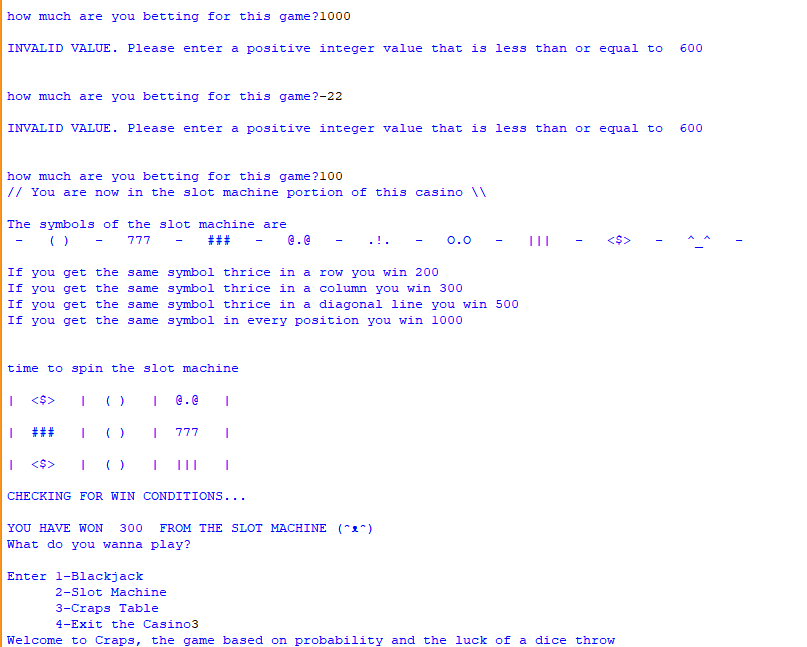
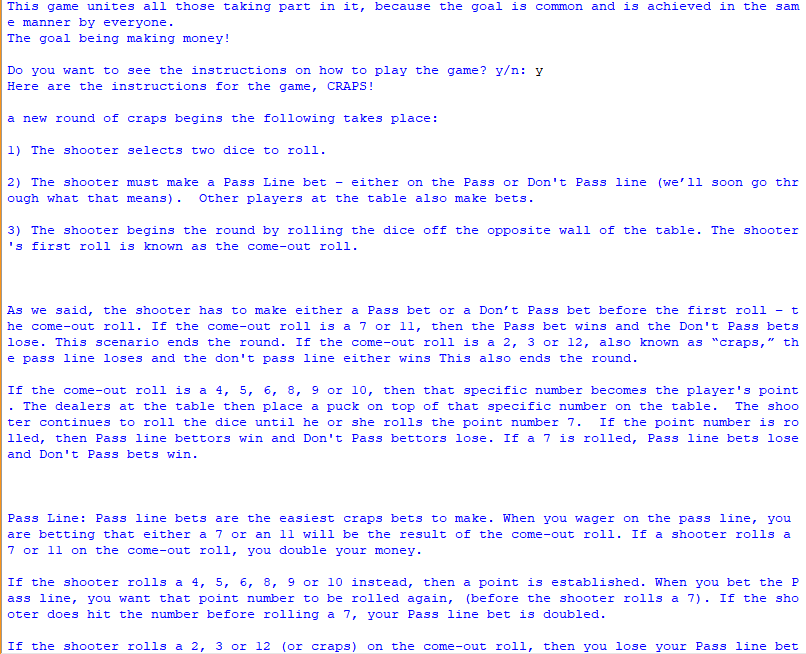
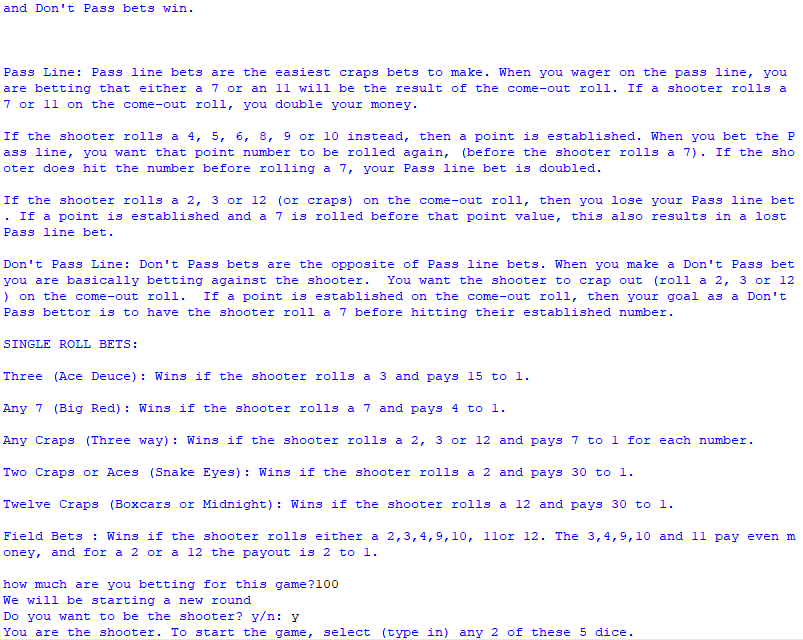
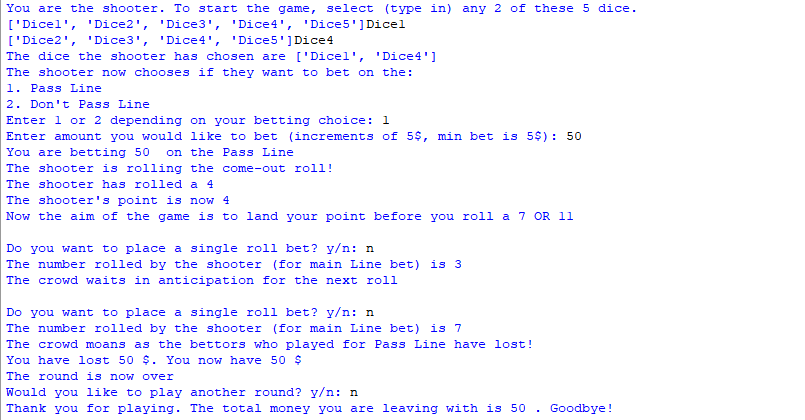
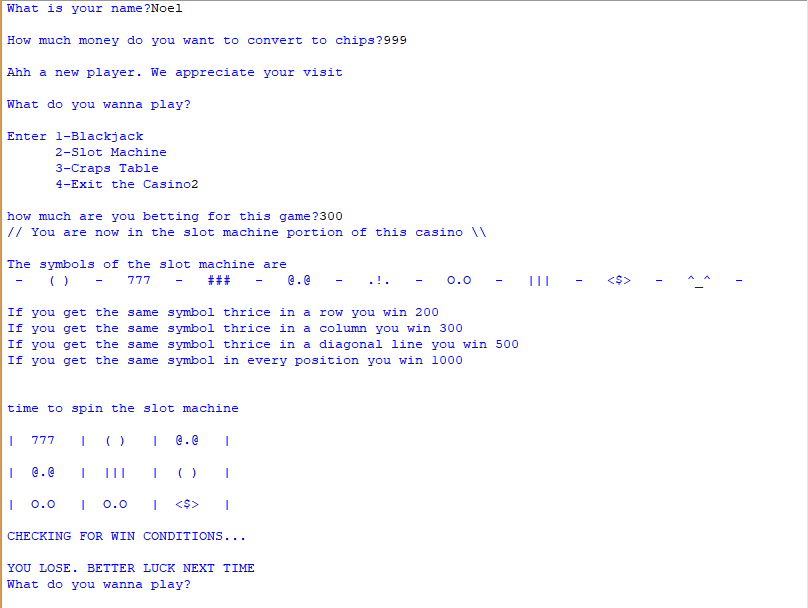
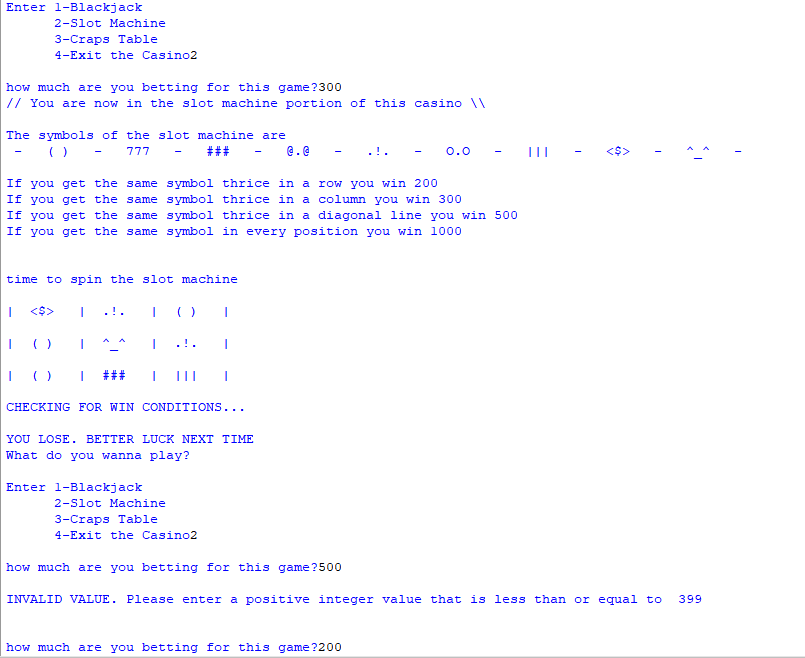
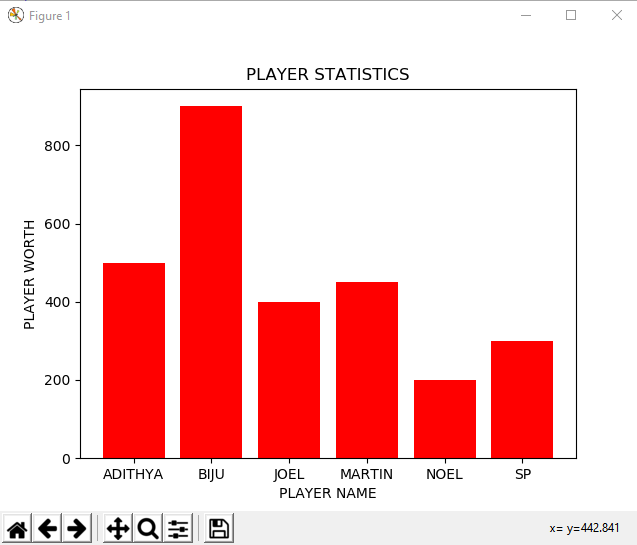
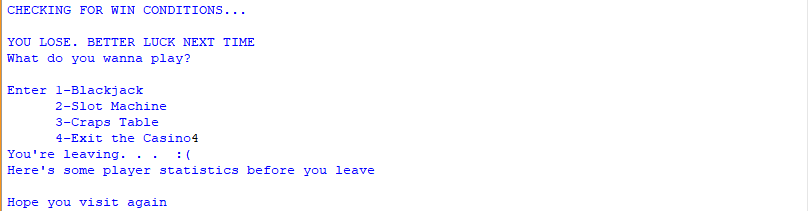
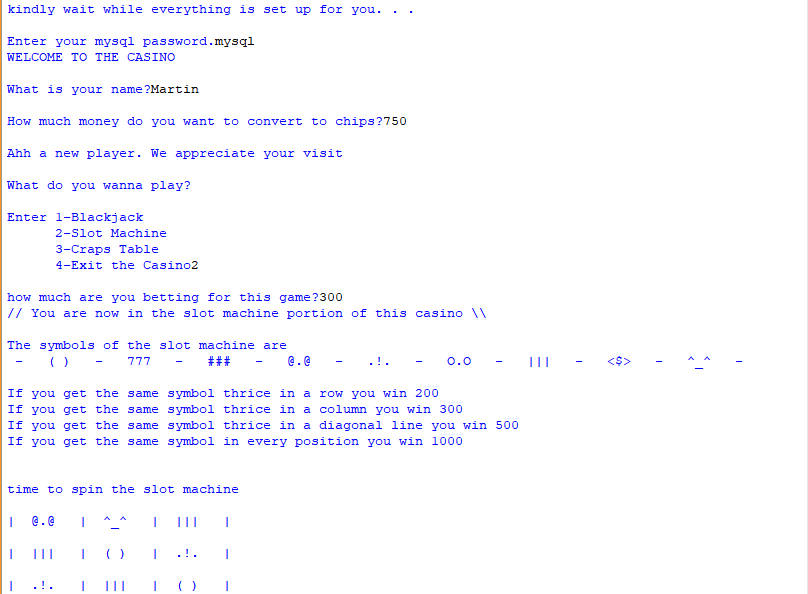
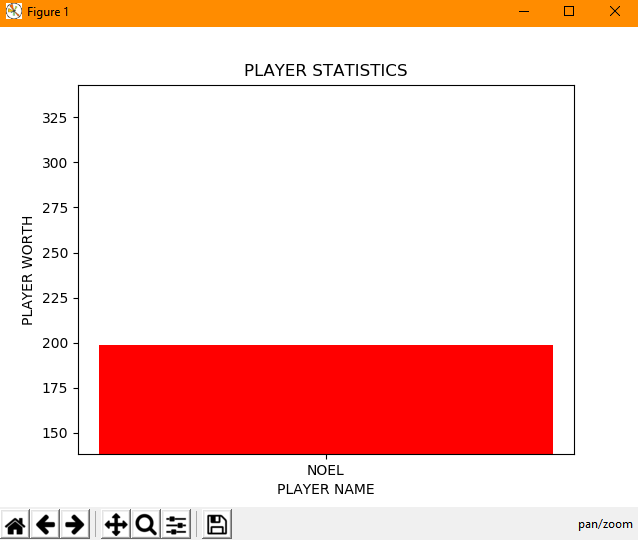
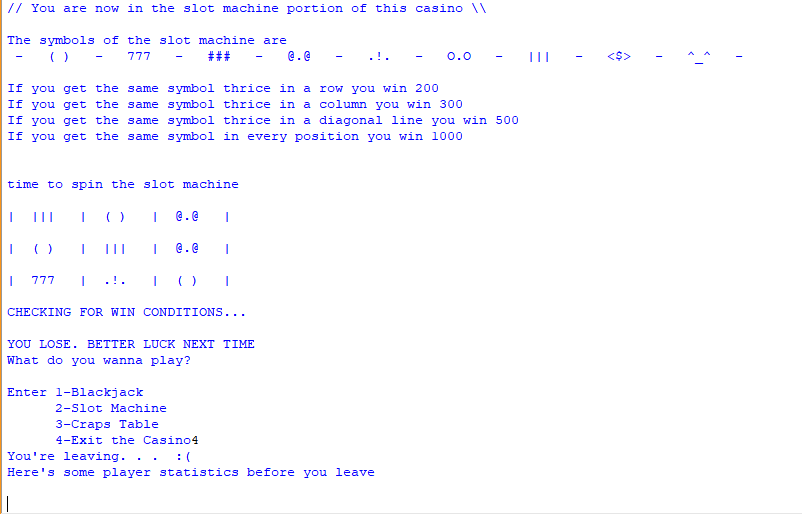
\$$ / $$ | $$ |$$ | $$ | $$$$ \_$$$$ |$$ | $$ |$$ \$$$$ | \\_\_|\\_\_|\\_\_|

$$ | $$ | $$ |$$ | $$ | $$$ / \$$$ |$$ | $$ |$$ |\$$$ |

$$ | $$$$$$ |\$$$$$$ | $$ / \$$ | $$$$$$ |$$ | \$$ | $$\ $$\ $$\

\\_\_| \\_\_\_\_\_\_/ \\_\_\_\_\_\_/ \\_\_/ \\_\_| \\_\_\_\_\_\_/ \\_\_| \\_\_| \\_\_|\\_\_|\\_\_|

OUTPUT SCREENS

BIBLIOGRAPHY

* w3schools.com/python
* w3schools.com/mysql
* en.wikipedia.org/craps
* en.wikipedia.org/blackjack
* en.wikipedia.org/slot\_machine
* yahoo.com
* bing.com
* google.com
* python.org
* mysql.com
* reddit.com/r/python
* reddit.com/r/mysql
* stackexchange.com
* Class 12 CBSE Python Textbook by Sumita Arora
* Class 12 CBSE Python Textbook by Preeti Arora