

# CODE:

## (Game.py)

```
1  import os
2  import mysql.connector as conn
3
4  db = conn.connect(host="localhost", user="root", password="tiger", autocommit=True)
5  cursor = db.cursor()
6
7
8  def checkDatabase():
9      cursor.execute("SHOW DATABASES")
10     a = cursor.fetchall()
11     if ("guess_the_number",) not in a:
12         cursor.execute("CREATE DATABASE guess_the_number")
13         cursor.execute("USE guess_the_number")
14         cursor.execute("CREATE TABLE users(username char(50) PRIMARY KEY NOT NULL, password char(50) NOT NULL)")
15         cursor.execute("CREATE TABLE scores(username char(50) , score int, date DATE, foreign key (username) references users(username))")
16
17     checkDatabase()
18     cursor.execute("USE guess_the_number")
19
20  def signUp():
21     username = input("Enter username: ")
22     cursor.execute("SELECT * FROM users WHERE username = %s", (username,))
23     result = cursor.fetchone()
24     if result:
25         print("Username already exists. Please choose a different username.")
26         return False
27     password = input("Enter password: ")
28
29
30     cursor.execute("INSERT INTO users VALUES (%s, %s)", (username, password))
31
32     print("Account created successfully")
33     return True
34
35  def login():
36     username = input("Enter username: ")
37     password = input("Enter password: ")
38
39     cursor.execute("SELECT * FROM users WHERE username = %s AND password = %s", (username, password))
40     result = cursor.fetchone()
41     if result:
42         print("Login successful")
```

```

43     import branch
44     branch.main(username)
45     return True
46 else:
47     print("Invalid username or password")
48     return False
49
50 while True:
51     print('''
52         Press 1 to create account
53         Press 2 to login to an existing account
54         Press 3 to exit
55         | ''')
56
57     UI = input("Enter your choice: ")
58     if UI == "1":
59         while True:
60             r = signUp()
61             if r:
62                 break
63
64     elif UI == "2":

```

Click to add a breakpoint

```

66         r = login()
67         if r:
68             break
69     elif UI == "3":
70         print("Exited")
71         break
72     else:
73         print("Invalid input")
74

```

## (Branch.py)

```

1  import mysql.connector as conn
2  import random
3  import datetime
4
5  db = conn.connect(host="localhost", user="root", password="tiger", autocommit=True,
6  database="guess_the_number")
7
8  cursor = db.cursor()
9
10 '''
11 SUBFUNCTIONS OF THE MAIN START HERE
12 '''
13 def game_loop(username):
14
15     number_to_guess = random.randint(1, 100)
16
17     chances = 10
18
19     print(f"Welcome {username} to the Guess the Number game!")
20     print("I'm thinking of a number between 1 and 100. You have 10 chances to guess it.")
21
22     while chances > 0:

```

```

Click to add a breakpoint ss = int(input("Enter your guess: "))
24
25     if guess < number_to_guess - 30:
26         print("Your number is very small. Try again.")
27     elif guess > number_to_guess + 30:
28         print("Your number is very large. Try again.")
29     elif guess < number_to_guess - 20:
30         print("Your number is small. Try again.")
31     elif guess > number_to_guess + 20:
32         print("Your number is large. Try again.")
33     elif guess < number_to_guess:
34         print("Your number is a little small. Try again.")
35     elif guess > number_to_guess:
36         print("Your number is a little large. Try again.")
37     else:
38         print(f"Congratulations, {username}! You guessed the number correctly.")
39         score = chances
40         break
41
42     chances -= 1
43

```

```

Click to add a breakpoint
45     print(f"Sorry, {username}. You ran out of chances. The number was {number_to_guess}")
46     score = 0
47
48     print(f"Your final score is: {score}")
49     cursor.execute("INSERT INTO scores VALUES (%s, %s, %s)", (username, score, datetime.datetime.now().
50         strftime('%Y-%m-%d')))
51
52     def score(username):
53         cursor.execute("SELECT score,date FROM scores WHERE username = %s", (username,))
54         scores = cursor.fetchall()
55         for i in scores:
56             print(f"{i[0]} points achieved on {i[-1]}")
57
58     def highscore(username):
59
60         cursor.execute("SELECT score,date FROM scores WHERE username = %s", (username,))
61         highscore = cursor.fetchall()
62         x = (max(highscore))
63

```

```

64     print(f"Your highscore is {x[0]} on {x[1]}")
65
66     def clear_score(username):
67         cursor.execute("DELETE FROM scores WHERE username = %s", (username,))
68         print("Your score is cleared.")
69
70     def delete_account(username):
71         cursor.execute("DELETE FROM scores WHERE username = %s", (username,))
72         cursor.execute("DELETE FROM users WHERE username = %s", (username,))
73         print("Your account is deleted.")
74
75     '''
76     SUBFUNCTIONS OF THE MAIN END HERE
77     '''
78

```

```
79 ∨ def main(username):
80 ∨     while True:
81 ∨         print("""
82             Commands -->
83             start - Start the game
84             score - Show the score
85             highscore - Show the highscore
86             clear_score - Clear the score
87             delete_account - Delete the account
88             exit - Exit the game
89             """)
90
91         ui = input("Enter your command: ")
92
93 ∨         if ui == "start":
94             game_loop(username)
95 ∨         elif ui == "score":
96             score(username)
97 ∨         elif ui == "highscore":
98             highscore(username)
99 ∨         elif ui == "clear_score":
100             clear_score(username)
101 ∨         elif ui == "delete account":
```

```
102             delete_account(username)
103             break
104         elif ui == "exit":
105             print("You are exiting the game.")
106         else:
107             print("Invalid command.")
108
109
```

# OUTPUT

```
PS C:\Users\krish\OneDrive\Documents\PROJECT> python -u "c:\Users\krish\OneDrive\Documents\PROJECT\Game.py"
```

```
Press 1 to create account
Press 2 to login to an existing account
Press 3 to exit
```

```
Enter your choice: 1
Enter username: krishanu_gamer
Enter password: pass123
Account created successfully
```

```
Press 1 to create account
Press 2 to login to an existing account
Press 3 to exit
```

```
Enter your choice: 2
Enter username: krishanu_gamer
Enter password: pass123
Login successful
```

```
Commands -->
start - Start the game
score - Show the score
highscore - Show the highscore
clear_score - Clear the score
delete_account - Delete the account
exit - Exit the game
```

```
Enter your command: start
Welcome krishanu_gamer to the Guess the Number game!
I'm thinking of a number between 1 and 100. You have 10 chances to guess it.
Enter your guess: 60
Your number is large. Try again.
Enter your guess: 40
Your number is a little large. Try again.
Enter your guess: 35
Your number is a little small. Try again.
Enter your guess: 37
Your number is a little small. Try again.
Enter your guess: 38
Your number is a little small. Try again.
Enter your guess: 39
Congratulations, krishanu_gamer! You guessed the number correctly.
Your final score is: 5
```

```
Commands -->
start - Start the game
score - Show the score
highscore - Show the highscore
clear_score - Clear the score
delete_account - Delete the account
exit - Exit the game
```

```
Enter your command: score
5 points achieved on 2024-08-18
```

```
Commands -->
start - Start the game
score - Show the score
highscore - Show the highscore
clear_score - Clear the score
delete_account - Delete the account
exit - Exit the game
```

```
Enter your command: highscore
Your highscore is 5 on 2024-08-18
```



```
Commands -->
start - Start the game
score - Show the score
highscore - Show the highscore
clear_score - Clear the score
delete_account - Delete the account
exit - Exit the game
```

```
Enter your command: clear_score
Your score is cleared.
```

```
Commands -->
start - Start the game
score - Show the score
highscore - Show the highscore
clear_score - Clear the score
delete_account - Delete the account
exit - Exit the game
```

```
Enter your command: delete_account
Your account is deleted.
```

```
Your account is deleted.
```

```
Press 1 to create account
Press 2 to login to an existing account
Press 3 to exit
```

```
Enter your choice: 3
Exited
```