

Assingment 2

February 8, 2025

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0.1.1 2025/02/04

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[4]: # 01 Answer
a = 100
b = 29
result =(a + b) * 3
Final_result = result ** 2
print(f"The result is: {Final_result}")
```

The result is: 149769

```
[6]: # 02 Answer
name = input("Enter your name: ")
year_of_birth = int(input("Enter your year of birth: "))
age = int(input("Enter your age: "))

last_two_digits = str(year_of_birth)[-2:]
first_three_letters = name[:3]

# Calculating the 2nd power of the age
age_power = str(age ** 2)

# Creating password
password = last_two_digits + first_three_letters + age_power

# Displaying password
print("Generated Password:", password)
```

Enter your name: Nethmi Malsha

Enter your year of birth: 2002

Enter your age: 23

Generated Password: 02Net529

```
[8]: # 03 Answer
num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))
```

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# Checking even or odd conditions
if num1 % 2 == 0 and num2 % 2 == 0:
    print("Both numbers are even.")
elif num1 % 2 == 0 or num2 % 2 == 0:
    print("One of the numbers is even.")
else:
    print("Both numbers are odd.")

```

Enter the first number: 5

Enter the second number: 6

One of the numbers is even.

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[12]: # 04 Answer
num = int(input("Give an integer: "))

# Calculating the sum of all positive numbers from 0 to (num - 1)
sum_total = sum(range(num))

# Displaying the result
print("The sum was:", sum_total)

```

Give an integer: 5

The sum was: 10

```

[18]: # 05 Answer
import random

# Generates a random number between 0 and 10
dealer_number = random.randint(0, 10)

tries = 0
guessed = False

print("Guess the number (between 0 and 10)!")

while not guessed:
    # Player inputs a number
    player_guess = int(input("Player: "))
    tries += 1

    # Check if the guess is correct
    if player_guess < dealer_number:
        print("Try a greater number.")
    elif player_guess > dealer_number:
        print("Try a smaller number.")
    else:
        guessed = True

```

```
print(f"That's right! Number of tries: {tries}")
```

Guess the number (between 0 and 10)!

Player: 2

Try a greater number.

Player: 7

Try a greater number.

Player: 8

Try a greater number.

Player: 9

Try a greater number.

Player: 10

That's right! Number of tries: 5

```
[22]: # 05 Answer
import random

def play_game(player_name):
    number_to_guess = random.randint(0, 10) # Dealer's number
    attempts = 0

    print(f"\n{player_name}, it's your turn!")

    while True:
        try:
            guess = int(input(f"{player_name}: "))
            attempts += 1
            if guess < number_to_guess:
                print("Try a greater number.")
            elif guess > number_to_guess:
                print("Try a smaller number.")
            else:
                print(f"\nThat's right! Number of tries: {attempts}\n")
                return attempts
        except ValueError:
            print("Please enter a valid integer.")

# Play for two players
print("Welcome to the Guessing Game!\n")

tries_player1 = play_game("Player1")
tries_player2 = play_game("Player2")
```

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# Determine the winner
if tries_player1 < tries_player2:
    print("Winner is Player1!")
elif tries_player2 < tries_player1:
    print("Winner is Player2!")
else:
    print("It's a tie!")
```

Welcome to the Guessing Game!

Player1, it's your turn!

Player1: 2

Try a greater number.

Player1: 7

Try a smaller number.

Player1: 5

Try a greater number.

Player1: 6

That's right! Number of tries: 4

Player2, it's your turn!

Player2: 2

Try a smaller number.

Player2: 1

That's right! Number of tries: 2

Winner is Player2!

[]: