Assignment 2

February 12, 2024

0.1 Assignement 2

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0.3 Date : 12/02/2024

0.4 Question 1

```python
[13]: number_1 = 100
      number_2 = 29

      result = (number_1 + number_2) * 3

      new_result = result ** 2

      print("The result of the calculation was:")

      print("\t",new_result)
```

```
The result of the calculation was:
        149769
```

0.5 Question 2

```python
[15]: name = input("Name: ")

      date_of_birth = int(input("Year of birth: "))

      age = int(input("Age: "))


      year_numbers = str(date_of_birth)[-2:]


      name_letters = name[:3]


      age_power = str(age ** 2)
```

```
password = year_numbers  + name_letters + age_power


print("Password:", password)
```

```
Name: John
Year of birth: 1995
Age: 26
Password: 95Joh676
```

0.6 Question 3

```
[17]: first_number = int(input("First number: "))

      second_number = int(input("Second number: "))

      if first_number % 2 == 0 and second_number % 2 == 0:
          print("Both numbers are even.")
      elif first_number % 2 == 0 or second_number % 2 == 0:
          print("One of the numbers is even.")
      else:
          print("Both numbers are odd.")
```

```
First number: 5
Second number: 6
One of the numbers is even.
```

0.7 Question 4

```
[19]: number = int(input("Give an integer: "))

      total = 0

      for i in range(number):
          total = total + i

      print("The sum was:", total)
```

```
Give an integer: 5
The sum was: 10
```

0.8 Question 5

```
[20]: import random

      player1_tries = 0
      player2_tries = 0
```

```python
target_number = random.randint(0, 10)
tries = 0

while True:
    guess = int(input("Player1: "))
    player1_tries += 1

    if guess == target_number:
        print("That's right! Number of tries:", player1_tries)
        break
    elif guess < target_number:
        print("Try a greater number.")
    else:
        print("Try a smaller number.")

target_number = random.randint(0, 10)
tries = 0

while True:
    guess = int(input("Player2: "))
    player2_tries += 1

    if guess == target_number:
        print("That's right! Number of tries:", player2_tries)
        break
    elif guess < target_number:
        print("Try a greater number.")
    else:
        print("Try a smaller number.")


if player1_tries < player2_tries:
    print("Winner is Player1")
elif player2_tries < player1_tries:
    print("Winner is Player2")
else:
    print("It's a tie!")
```

```
Player1: 3
Try a smaller number.
Player1: 2
Try a smaller number.
Player1: 1
That's right! Number of tries: 3
Player2: 4
That's right! Number of tries: 1
Winner is Player2
```