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In [ ]: name: Tahrin Tasmim
date: 10.02.2025
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Problem Solution:1

```
In [18]: number1=100
number2=29
sum_result=number1+number2
multiplied_result=sum_result*3
final_result=multiplied_result**2
print("The result of the calculation was:")
print("      ", final_result)
```

The result of the calculation was:
149769

Problem Solution: 2

```
In [7]: name=input("Name: ")
year_of_birth=int(input("Year of birth: "))
age=int(input("Age: "))
last_two_digit_year=str(year_of_birth)[-2:]
first_three_letter_name=name[:3]
age_power_value=str(age**2)
password=last_two_digit_year+first_three_letter_name+age_power_value
print("Password:", password)
```

Password: 95Joh676

Problem Solution: 3

```
In [9]: 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")
```

One of the numbers is even

```
In [13]: user_input=int(input("Give an integer:" ))
total_sum=sum(range(user_input))
print("The sum was: ",total_sum)
```

The sum was: 10

Problem Solution: 4

```
In [ ]: import random
dealer_number=random.randint(0,10)
tries=0
while True:
    player_guess=int(input("Player: "))
    tries=tries+1
    if player_guess==dealer_number:
        print("That's right! Number of tries",tries)

    elif player_guess<dealer_number:
        print("Try a greater number.")
    else:
        print("Try a smaller number.")
```

Try a greater number.
Try a greater number.
Try a greater number.
That's right! Number of tries 4

Problem Solution: 5

```
In [21]: import random
def guessing_game(player_name):
    dealer_number=random.randint(0,10)
    tries=0
    print(f"{player_name}'s turn:")
    while True:
        player_guess=int(input(f"{player_name}: "))
        tries=tries+1

        if player_guess==dealer_number:
            print("That's right! Number of tries: ",tries)
            return tries
        elif player_guess<dealer_number:
            print("Try a greater number.")
        else:
            print("Try a smaller number.")

player1_tries=guessing_game("Player1")
player2_tries=guessing_game("Player2")
if player1_tries<player2_tries:
    print("Player1 wins!")

elif player2_tries<player1_tries:
    print("Player2 wins!")

else:
    print("It's a tie!")
```

Player1's turn:
Try a greater number.
Try a greater number.
Try a greater number.
That's right! Number of tries: 4
Player2's turn:
Try a smaller number.
Try a greater number.

