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#4/22/2024
#P5HW
#Loop functions
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import random
```

```
def add():
    guesses = 1
    rand_num1 = random.randint(1, 100)
    rand_num2 = random.randint(1, 100)
    add = rand_num1 + rand_num2
    print(f'{rand_num1:4}')
    print("+", rand_num2)
    print()
    answer = int(input("Enter answer: \n"))
    while answer != add:
        if answer < add:
            print("Sorry, guess is too low.\n")
            print("Try again: ")
            guesses += 1
            answer = int(input("Enter answer: \n"))
        if answer > add:
            print("Sorry, guess is too high.\n")
            print("Try again: ")
            guesses += 1
            answer = int(input("Enter answer: \n"))
        if answer == add:
            print("Congratulations!!!! Your answer is correct.")
    print("Number of guesses: ", guesses)
```

```
def sub():
    guesses = 1
    rand_num1 = random.randint(1, 100)
    rand_num2 = random.randint(1, 100)
    sub = rand_num1 - rand_num2
    print(f'{rand_num1:4}')
    print("-", rand_num2)
    print()
    answer = int(input("Enter answer: \n"))
    while answer != sub:
        if answer < sub:
            print("Sorry, guess is too low.\n")
            print("Try again: ")
            guesses += 1
            answer = int(input("Enter answer: \n"))
        if answer > sub:
            print("Sorry, guess is too high.\n")
            print("Try again: ")
            guesses += 1
            answer = int(input("Enter answer: \n"))
        if answer == sub:
            print("Congratulations!!!! Your answer is correct.")
    print("Number of guesses: ", guesses)
```

```
def main():
    print("Welcome to Math Quiz")
    print()
    print("MAIN MENU")
    print("-----")

    print("1. Adding Random Numbers")
    print("2. Subtracting Random Numbers")
    print("3. Exit")
    print()
    main_opt = int(input("Please choose one of the menu options: "))
    while main_opt != 3:
        if main_opt == 1:
            add()
        if main_opt == 2:
            sub()
        print()
        print("MAIN MENU")
        print("-----")

        print("1. Adding Random Numbers")
        print("2. Subtracting Random Numbers")
        print("3. Exit")
        print()
        main_opt = int(input("Please choose one of the menu options: "))

    print("Thank you for playing...")
    print("Bye!!")
```

