

#This program gives math quizzes with two random numbers and executes simple math calculations

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#CTI-110 P5HW - Math Quiz

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import random

#Function for addition

def addition():

#Getting random integers in range 1 to 100

num_1 = random.randint(1,100)

num_2 = random.randint(1,100)

print(' ',num_1)

print(' + ',num_2)

#Calculating addition

add = num_1 + num_2

#Asking for user answer

answer = int(input('\nEnter answer.\n'))

#Count guesses

guess = 1

#Loop for getting answer while answer is not correct

while add!=answer:

if answer < add:

 print('Sorry, guess is too low.')

else:

 print('Sorry, guess is too high.')

#Asking for user answer

 answer = int(input('\nTry again: '))

#Incrementing the count of guesses

 guess += 1

#Printing when answer is correct

print('Congratulations!!!! Your answer is correct.')

print('Number of guesses: ',guess)

#Function for subtraction

def subtraction():

#Getting random integers in range 1 to 100

num_1 = random.randint(1, 100)

num_2 = random.randint(1, 100)

print(' ', num_1)

print(' - ', num_2)

#Calculating subtraction

sub = num_1 - num_2

#Asking for user answer

answer = int(input('\nEnter answer.\n'))

#Count guesses

guess = 1

#Loop for getting answer while answer is not correct

while sub != answer:

if answer < sub:

 print('Sorry, guess is too low.')

else:

 print('Sorry, guess is too high.')

#Asking for user answer

 answer = int(input('\nTry again: '))

#Incrementing the count of guesses

 guess += 1

#Printing when answer is correct

print('Congratulations!!!! Your answer is correct.')

print('Number of guesses: ',guess)

#Function to display MAIN MENU for user choice

def main():

print('\nMAIN MENU')

print('-'*20)

print('1. Adding Random Numbers')

print('2. Subtracting Random Numbers')

print('3. Exit\n')

#Asking for user input

option = int(input('Please choose one of the menu options: '))

#If option equals to 1 call addition() function

if option == 1:

 addition()

#If option equals to 2 call subtraction() function

elif option == 2:

 subtraction()

#If option equals to 3 exit the program

elif option == 3:

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    print('Thank you for playing...')
    print('Bye!!')
    exit()

#Else display an error message
else:
    print('Invalid option. Please choose again.')

#Calling the function until user exits the program
main()
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print('Welcome to Math Quiz\n')
main()
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