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#print your name

a = raw\_input("what is your name")

print("hello"+""+ a)

#print greeting to someone by user input.

a = raw\_input("what is your name ?")

print("oh hi there"+ a + "how are you doing ?" )

#sum of 2 numbers by manual input

a = 2

b= 6

print (a+b)

#multiplication of 2 numbers by user input.

a = int(raw\_input("enter first number"))

b = int(raw\_input("enter second number"))

print(a\*b)

#sum of square of 2 numbers by using function

def sum(x,y):

p = x\*x+y\*y

print p

sum(2,4)

#percentage of student marks from 3 subjects

from \_\_future\_\_ import division

a = int(raw\_input("enter marks from first subject"))

b = int(raw\_input("enter marks from second subject"))

c = int(raw\_input("enter marks from third subject"))

perc = ((a+b+c)/300)\*100

print perc

#area and volume of cube

a = float(raw\_input("enter side of cube"))

area = 6\*a\*a

volume = a\*a\*a

print(area)

print(volume)

#convert distance in kms to meter,feet,yards and inches

a = float(raw\_input("enter length in km"))

yards = a\*1093.61

inch = a\*39370.1

meter = a\*1000

feet = a\*3280.84

print(yards)

print( inch)

print( meter)

print ( feet)

#swap two numbers without any temporary variable

x = 10

y = 5

x = x + y; #x now becomes 15

y = x - y; #y becomes 10

x = x - y; #x becomes 5

print("After Swapping: x = y = " , x, y)

#check whether the given number is even or odd

a = int(raw\_input("enter number to be checked"))

if (a%2 == 0):

print("the given number is even")

else:

print("the given number is odd")

#check number is positive or negative using function

def num(a):

if (a>0):

print("positive number")

else:

print("negative number")

num(4)

#to check larger of 2 numbers

a = int(raw\_input("enter number to be checked"))

b = int(raw\_input("enter another number to be checked"))

if (a>b):

print("first number is greater")

elif (b>a):

print("second is greater")

else:

print("both are equal")

#To check whether the given triangle is equilateral,scalene or isoceles

a = int(raw\_input("enter side of triangle"))

b = int(raw\_input("enter side of triangle"))

c = int(raw\_input("enter side of triangle"))

if ((a==b) and (b==c) and (a==c)):

print("the triangle is equilateral")

elif ((a==b) or (b==c) or (c==a)):

print("the triangle is isoceles")

else:

print("the triangle is scalene")

#Take two numbers as input and test whether two numbers are equal,Ist is greater than second or lesser.

a = int(raw\_input("enter number to be checked"))

b = int(raw\_input("enter another number to be checked"))

if (a>b):

print("first number is greater")

elif (b>a):

print("second is greater")

else:

print("both are equal")

#input marks of student and assign a grade

a = float(raw\_input("enter marks"))

if (a>100 or a<0):

print("enter value between 0 to 100")

if (a>=70):

print("pass")

if (a>90):

print("grade is A")

elif(a>80 or a<=90):

print("grade is B")

else:

print("fail")

#if else ladder

a = float(raw\_input("enter the percentage"))

if (a>100 or a<0):

print("enter value between 0 to 100")

elif (a>0 and a<60):

print("you got 0 marks ")

elif (a<=60 or a<70):

print("you got 4 marks")

elif (a<=70 or a<80):

print("you got 6 marks")

elif (a<=80 or a<90):

print("you got 8 marks")

elif (a<=90 or a<=100):

print("you got 10 marks")

#function to check the saved username and password of student and give appropriate message if any of them is wrong

users = {}

status = ""

def displayMenu():

status = raw\_input("Are you a registered user? y/n? Press q to quit: ")

if status == "y":

oldUser()

elif status == "n":

newUser()

def newUser():

createLogin = raw\_input("Create login name: ")

if createLogin in users: # check if login name exists

print "\nLogin name already exist!\n"

else:

createPassw = raw\_input("Create password: ")

users[createLogin] = createPassw # add login and password

print("\nUser created!\n")

def oldUser():

login = raw\_input("Enter login name: ")

passw = raw\_input("Enter password: ")

# check if user exists and login matches password

if login in users and passw == users[login]:

print "\nLogin successful!\n"

else:

print "\nUser doesn't exist or wrong password!\n"

while status != "q":

displayMenu()

newUser()

oldUser()

#function to enter the age of a person and check if he is elligible for work.

def work(age):

age = int(raw\_input("what is your age ?"))

if (age<18):

print("you are not eligible to work")

elif (age >= 18 and age<=60):

print("you are eligible to work")

else:

print("you are too old to work as per the rules of the government")

work(33)