#1. Create three variables in a single line and assign values to them in such a manner that

#each one of them belongs to a different data type.

var1, var2, Var3 = 3, 5.0, "Hello World"

#2.Create a variable of type complex and swap it with another variable of type integer.

com = 2j

int1 = 3

temp = com

com = int1

int1 = temp

int1

#3.Swap two numbers using a third variable and do the same task without using any third variable.

i , j= 2, 1

temp = i #with temp variable

i=j

j=temp

print("before swapping i & j =" ,i,j)

i, j = j, i # without third variable

print("after swapping i & j =" ,i,j)

#4.Write a program that takes input from the user and prints it using both Python

#2.x and Python 3.xVersion.

input1 = eval(raw\_input("Enter input 1:")) #in version 2.x

input1

input2 = input("Enter input 2:") #in version 3.x

input2

#5.Write a program to complete the task given below:

#Ask users to enter any 2 numbers in between 1-10 ,

#add the two numbers and keep the sum in another variable called z.

#Add 30 to z and store the output in variable result and print result as the final output.

num1 = int(input("enter a number between 1-10"))

num2 = int(input("enter a number between 1-10"))

num1

z = num1 + num2

z

result = z + 30

print ("result is:", result)

#6.Write a program to check the data type of the entered values.

#HINT: Printed output should say -The data type of the input value is : int/float/string/etc

c = eval(input("Enter any value"))

print("The data type of the input value is:",type(c))

#8.If one data type value is assigned to ‘a’ variable and then a different data type value

#is assigned to ‘a’ again. Will it change the value? If Yes then Why?

new = 3

type(new)

new = 3.9

type(new)

# It does change the type of data because python is dynamic and imperative language and

# it takes care of the datatype as the program goes on. The state of the variable changes according to

# the line of code.