# 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.

x, y, z = “Hello world”, 6.0, 2

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

complx = 1 + 2i

intVar = 1

complx, intVar = intVar, complx

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

def swapWithThridVariable():

x = 3

y = 5

tmp = 0

tmp = x

x = y

y = tmp

def swapWithoutThridVariable():

x = 3

y = 4

x, y = y, x

# 4. Write a program that takes input from the user and prints it using both Python 2.x and Python 3.x Version.

def printUserInput():

x = input("Enter x")

y = input\_raw("Enter y")

print(x)

print(y)

# 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.

def sum():

print("enter any 2 numbers in between 1-10 ")

x = eval(input("Enter value of x"))

y = eval(input("Enter the value of y "))

z = x + y

res = z + 30

print(res)

# 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

def getDataType():

x = eval(input("Enter x "))

if isinstance(x, int):

varType = "int"

elif isinstance(x, str):

varType = "str"

elif isinstance(x, bool):

varType = "boolean"

elif isinstance(x, float):

varType = "float"

elif isinstance(x, complex):

varType = "complex"

print(varType)

# 7. Create Variables using formats such as Upper CamelCase, Lower CamelCase, SnakeCase and UPPERCASE.

helloWorld = “helloWorld”

HelloWorld = “HelloWorld”

Hello world = “Hello world”

HELLOWORLD = “HELLOWORLD”

# 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?

Yes, because python supports reassigning the values to variables with different data types.