**Python Datatypes Assignment (Up to Dictionaries)**

1. Add an integer and float. What is the result’s type?

a=1

b=5.5

result = a+b

print(result)

#6.5

print(type(result))

#<class ‘float’>

1. Create a string and access its:

Str1=”python”

* 1. First character

str1="python"

print(str1[0])

# p

* 1. Last character

Print(str1[5])

# n

* 1. A substring from index 2 to 5

Print(str1[2:5])

# tho

1. Concatenate two strings and print the result.

str1="hello"

str2="world"

print(str1+str2)

# hello world

1. Define list. What are the difference between List and Tuple.

List: a list is a hydrogenous collection of data.

List is mutable, where as tuple is immutable.tuple undergoes quick iternation than list.

1. Write a programme to print a list in reverse order.

list1=[1,2,3,5.4,'3i+j']

print(list1[::-1])

# [‘3j+I,5.4,3,2,1]

1. Create a tuple of 4 elements. Print the first and last element.

tup1=(1,2,3,4.5,"str1",5.4)

print(tup1[0],tup1[4])

# 1 str1

1. Try changing a value in a tuple. What happens?

While trying to change a value in a tuple it throws an error as item reassignment is not possible in tuple .

As tuple is immutable it doesn’t support any reassignment.

1. Create a dictionary of 3 students with their marks. Print the dictionary.

dic1={‘anu’:460,’jaanu’:400,’manju’:300}

Print(dic1)

#{‘anu’:460,’jaanu’:400,’manju’:300}

1. Access the marks of one student using their name.

dic1={‘anu’:200,’jytohi’:400,’manju’:300}

print(dic1(Jyothi))

#400

1. Update the marks of an existing student.

dic1{ ‘anu’:200’,’jyothi’:400’,’Jyothi’:300,’anusha’:400}

Print(dic1)

#{‘anu’:200,’jyothi’:300,’anusha’:400)

1. Can I access a key using a value in a dictionary.

No,we cant access a key using a value in a dictionary as keys are unique and values may repeat themselves .

1. Can I have duplicate values and keys in a dictionary? What happens if I wanted try to duplicate key in a dictionary?

A dictionary is a set of pair of key and key values whre we can have different key values but unique keys

Eg: d ={ “a”:2,”b”:3 ,”c”:3}

d ={“a” :2 , “a”:5}

print{d} # {“a” : 2}

1. Print all multiples of 17 using range. Numbers should start from -34 and end below 400.

Print(list(range(-34,17,400)))

#[-34,-17,0,17,34,51,68,85,102,119,136,153,170,187,204,221,238,255,272,289,306,323,340,357,374,391]