1Q. How to unpack the dictionary using while loop?

Unpacking a dictionary means extracting its keys and values one by one so that we can work with them separately.

Normally, we use for loop to iterate over a dictionary, but we can also use a while loop by converting the dictionary’s items into a list and then processing them one at a time using an index or by popping elements.

Example:

std = {"name": "Vishnu", "age": 22, "city": "Hyderabad"}

std\_list=list(std.items())

print(std\_list)

count=0

while count<len(std):

key,value=std\_list[count]

print(f"key:{key} value:{value}")

count+=1

2Q.Write a python program to print each character of all the names present in a list one by one?

Program:

v=[“Vishnu” , “Akash”]

for name in v:

for ch in name:

print(ch)

3Q. Sorting the List using bubble sort?

Bubble Sort in python is a simple algorithm that works by repeatedly comparing and swapping adjacent elements if they are in the wrong order. This process is repeated until the entire list is sorted.

The largest element bubbles up to the end of the list after each pass.

Example:

lst=[5,3,1,4,2]

for i in range(len(lst)):

for j in range(len(lst)) -1):

if lst[j]>lst[j+1]:

lst[j],lst[j+1]=lst[j+1], lst[j]

print(“Sorted list:”,n) #Output: Sorted list: [1,2,3,4,5]