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# Assignments: Data Structures in Python


#Question 1 :- Write a code to reverse a string.

#Answer :-

s = input("Enter a string : ")
reverse_string = s[::-1]
print(reverse_string)
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Enter a string : somnath giri
irig htanmos
```

```
#Question 2 :- Write a code to count the number of vowels in a string.

#Answer :-

s = input("Enter a string : ")
count = 0
for i in s:
    if i in 'aeiouAEIOU':
        count += 1
print(f"The number of vouwels present in the string is : {count}")
```

```
Enter a string : My name is somnath Gir
The number of vouwels present in the string is : 6
```

```
#Question 3:- Write code to check if given string is a palindrome or not.

#Answer :-

s = input("Enter a string : ")
reverse_string = s[::-1]
if s == reverse_string:
  print(f"The Given string {s} is a palindrom string")
else:
  print(f"The Given string {s} is not a palindrom string")
```

```
Enter a string : 121
The Given string 121 is a palindrom string
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#Question no 4 :- Write a code to check if two given string are anagram of each others.

#Answers:-

s1 = input("Enter the frist string : ")
s2 = input("Enter the second string : ")

str1 = s1.lower()
str2 = s2.lower()

if len(str1) == len(str2):
  sorted_str1 = sorted(str1)
  sorted_str2 = sorted(str2)

  if sorted_str1 == sorted_str2:
    print(f"{s1} and {s2} are anagrame string")
  else:
    print(f"{s1} and {s2} are not anagrame string")
else:
  print(f"{s1} and {s2} are not anagrame string")
```

```
Enter the frist string : listen
Enter the second string : silent
listen and silent are anagrame string
```

```
#Question 5:- Write a code to find all occurrences of a given substring within another string.

#Answer :-

s = input("Enter a string : ")
s1 = s.lower()
another_string = input("Enter an another string : ")
s2 = another_string.lower()
if s1 in s2:
  print(f"{s} string occurance is present in the {another_string}")
else:
  print(f"{s} string occurance is not present in the {another_string} string")
```

```
Enter a string : somnath
Enter an another string : my name is somnath giri
somnath string occurance is present in the my name is somnath giri
```

```
#Question no 6:-  Write a code to perform basic string compression using the counts of repeated characters.

#Answer :-

# Input string
s = input("Enter a string : ")

char_count = {}

for char in s:
    if char in char_count:
        char_count[char] += 1
    else:
        char_count[char] = 1

repeated_elements = {char: count for char, count in char_count.items() if count >= 1}
print(repeated_elements)
```

```
Enter a string : hello world
{'h': 1, 'e': 1, 'l': 3, 'o': 2, ' ': 1, 'w': 1, 'r': 1, 'd': 1}
```

```
#Question no 7:-Write a code to determine if a string has all unique caracter.

#Answer :-

s = input("Enter a string : ")
unique_string = set(s)

if len(s) == len(unique_string):
  print("The string has all unique character")
else:
  print("The string has not all unique charcter")
```

```
Enter a string : somnath
The string has all unique character
```

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#Question no 8:- Write a code to connert a given string to uppercase or lowercase.

#Answer:-

s = input("Enter a string : ")
upper_case = s.upper()
lower_case = s.lower()

print(f"The upercase of the given string is {upper_case}")
print(f"The lower of the given string is {lower_case}")
```

```
Enter a string : Somnath
The upercase of the given string is SOMNATH
The lower of the given string is somnath
```

```
#Question no 9:- Write a code to count the number of words in a string.

#Answer :-

s = input("Enter a string : ")
l = len(s)

print(f"The number of elements of the given string  is : {l}")
```

```
Enter a string : somnath
The number of elements of the given string  is : 7
```

```
#Question no 10:- Write a code to concatenate two strings without using the + opertor.

#Answer :-

s1 = input("Enter the frist string : ")
s2 = input("Enter the second string :")

for char in s2:
  s1 += char
print(f"After concatenate the string is {s1}")
```

```
Enter the frist string : somnath
Enter the second string :giri
After concatenate the string is somnathgiri
```

```
#Question no 11:- Write a code to remove all occurrences of a specific element from a list.

#Answer :-
lis = []
no = int(input("Enter the no of elemets of the list : "))

for i in range(1,no+1):
  item = int(input(f"Enter the {i} element of the list : "))
  lis.append(item)

updated_lis = set(lis)
updated_list = list(updated_lis)

print(f"After the removal all occurances of specfic elements of the list the updated list is {updated_list}")
```

```
Enter the no of elemets of the list : 7
Enter the 1 element of the list : 1
Enter the 2 element of the list : 2
Enter the 3 element of the list : 2
Enter the 4 element of the list : 3
Enter the 5 element of the list : 3
Enter the 6 element of the list : 4
Enter the 7 element of the list : 4
After the removal all occurances of specfic elements of the list the updated list is [1, 2, 3, 4]
```

```
6#Question no 12:- Implement a code to find the se%ond largegt number in a given list of integers.

#Answer:-

lis = []
no = int(input("Enter the no of elemets of the list : "))

for i in range(1,no+1):
  item = int(input(f"Enter the {i} element of the list : "))
  lis.append(item)

max_element = max(lis)
index = lis.index(max_element)
lis.pop(index)
second_max_element = max(lis)
print(f"The second Maximum element of the list is {second_max_element}")
```

```
Enter the no of elemets of the list : 7
Enter the 1 element of the list : 1
Enter the 2 element of the list : 45
Enter the 3 element of the list : 63
Enter the 4 element of the list : 796
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Enter the 5 element of the list : 456
Enter the 6 element of the list : 992
Enter the 7 element of the list : 1021
The second Maximum element of the list is 992
```

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#Question no 13:- Create a code to count the occurrences of each element in a list and return a dictionar with elements as keys and their cou

#Answer :-

lis = []
no = int(input("Enter the no of elemets of the list : "))

for i in range(1,no+1):
  item = input(f"Enter the {i} element of the list : ")
  lis.append(item)

# Elements count

count = 0

set1 = set(lis)
for i in set1:
  for j in  lis:
    if i == j:
      count += 1



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Enter the no of elemets of the list : 1
Enter the 1 element of the list :
```

```
#Question no 14:- Write a code to reverse a list in-place without using any built-in reverse functions.

#Answer :-

#List element input

lis = []
n = int(input("Enter the no of elemets of the list : "))

for i in range(1,n+1):
  item = input(f"Enter the {i} element of the list : ")
  lis.append(item)

reverse_list = []
for i in range(0,n):
  reverse_list.append(lis[n-1-i])

print(f"The reverse list is {reverse_list}")
```

```
Enter the no of elemets of the list : 5
Enter the 1 element of the list : 1
Enter the 2 element of the list : 2
Enter the 3 element of the list : 3
Enter the 4 element of the list : 4
Enter the 5 element of the list : 5
The reverse list is ['5', '4', '3', '2', '1']
```

```
#Question no 15:- Implement a code to find and remove duplicates from a list while preserving the original order of elements.

#Answer :-

lis = []
n = int(input("Enter the no of elemets of the list : "))

for i in range(1,n+1):
  item = input(f"Enter the {i} element of the list : ")
  lis.append(item)

dup_list = []
set1 = set()

for i in lis:
  if i not in set1:
    dup_list.append(i)
    set1.add(i)

print(f"The romoved list is : {dup_list}")
```

```
Enter the no of elemets of the list : 5
Enter the 1 element of the list : 1
Enter the 2 element of the list : 2
Enter the 3 element of the list : 2
Enter the 4 element of the list : 2
Enter the 5 element of the list : 3
The romoved list is : ['1', '2', '3']
```

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1#Question no 16:- Create a code to check if a given list is sorted (either in acending or decending order) or not.

#Answer :-

lis = []
n = int(input("Enter the no of elemets of the list : "))

for i in range(1,n+1):
  item = int(input(f"Enter the {i} element of the list : "))
  lis.append(item)

# Acending order sorted
print(lis)
list1 = sorted(lis)
list2 = lis[::-1]

if list1 == lis:
  print("The list is sorted in accending order.")
elif list2 == sorted(list2):
  print("The list is sorted in decending order.")
else:
  print("The list is not shorted.")
```

```
Enter the no of elemets of the list : 5
Enter the 1 element of the list : 1
Enter the 2 element of the list : 2
Enter the 3 element of the list : 3
Enter the 4 element of the list : 4
Enter the 5 element of the list : 5
[1, 2, 3, 4, 5]
The list is sorted in accending order.
```

```
#Question no 17:- Write a code to merge two sorted lists into a single sorted lists.

#Answer:-

#input frist list
lis1 = []
n1 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n1+1):
  item1 = int(input(f"Enter the {i} element of the list : "))
  lis1.append(item1)
print(lis1)

#input second list
lis2 = []
n2 = int(input("Enter the no of elemets of the list : "))
```

```
n2 = int(input(" Enter the no of elemets of the list :  "))

for i in range(1,n2+1):
  item2 = int(input(f"Enter the {i} element of the list : "))
  lis2.append(item2)
print(lis2)
print()

sort_list1 = sorted(lis1)
sort_list2 = sorted(lis2)

final_list = sort_list1 + sort_list2
final_sorted_list = sorted(final_list)

print(final_sorted_list)
```

```
Enter the no of elemets of the list : 3
Enter the 1 element of the list : 1
Enter the 2 element of the list : -99
Enter the 3 element of the list : 0
[1, -99, 0]
Enter the no of elemets of the list : 6
Enter the 1 element of the list : 2
Enter the 2 element of the list : -63
Enter the 3 element of the list : 0
Enter the 4 element of the list : 89
Enter the 5 element of the list : -98
Enter the 6 element of the list : 101
[2, -63, 0, 89, -98, 101]

[-99, -98, -63, 0, 0, 1, 2, 89, 101]
```

```
#Question no 18:- Implement a code to find the intersection of two given lists.

#Answer :-

#input frist list
lis1 = []
n1 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n1+1):
  item1 = int(input(f"Enter the {i} element of the list : "))
  lis1.append(item1)
print(lis1)
set1 = set(lis1)

#input second list
lis2 = []
n2 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n2+1):
  item2 = int(input(f"Enter the {i} element of the list : "))
  lis2.append(item2)
print(lis2)
set2 = set(lis2)

set3 = set1 & set2
lis3 = list(set3)

print(f"The intersection of the elements of the two list is {lis3}")
```

```
Enter the no of elemets of the list : 3
Enter the 1 element of the list : 99
Enter the 2 element of the list : 78
Enter the 3 element of the list : 56
[99, 78, 56]
Enter the no of elemets of the list : 5
Enter the 1 element of the list : 99
Enter the 2 element of the list : 56
Enter the 3 element of the list : 65
Enter the 4 element of the list : 39
Enter the 5 element of the list : -42
[99, 56, 65, 39, -42]
The intersection of the elements of the two list is [56, 99]
```

```
#Question no 19:-Create a code to find the union of two lists without duplicates.

#Answer :-


#input frist list
lis1 = []
n1 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n1+1):
  item1 = input(f"Enter the {i} element of the list : ")
  lis1.append(item1)
print(lis1)
set1 = set(lis1)

#input second list
lis2 = []
n2 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n2+1):
  item2 = input(f"Enter the {i} element of the list : ")
  lis2.append(item2)
print(lis2)
set2 = set(lis2)

set3 = set1 | set2
lis3 = list(set3)

print(f"The elements of the unoin of two lists without duplicate is {lis3}")
```

```
Enter the no of elemets of the list : 3
Enter the 1 element of the list : Amelesh
Enter the 2 element of the list : sangita
Enter the 3 element of the list : subhayan
['Amelesh', 'sangita', 'subhayan']
Enter the no of elemets of the list : 5
Enter the 1 element of the list : manoj
Enter the 2 element of the list : dali
Enter the 3 element of the list : sangita
Enter the 4 element of the list : bandita
Enter the 5 element of the list : somnath
['manoj', 'dali', 'sangita', 'bandita', 'somnath']
The elements of the unoin of two lists without duplicate is ['Amelesh', 'somnath', 'bandita', 'sangita', 'dali', 'manoj', 'subhayan']
```

```
#Question no 20:- Write a code to shuffle a given list randomly without using any built-in shuffle functions.

#Answer:-


lis = []
n = int(input("Enter the no of elemets of the list : "))

for i in range(1,n+1):
  item = int(input(f"Enter the {i} element of the list : "))
  lis.append(item)

# For shuffle a list i convert list to the set.
set1 = set(lis)

list1 = list(set1)
print(f"The shuffle list is {list1}")
```

```
Enter the no of elemets of the list : 5
Enter the 1 element of the list : 1
Enter the 2 element of the list : 3
Enter the 3 element of the list : -5
Enter the 4 element of the list : 6
Enter the 5 element of the list : 2
The shuffle list is [1, 2, 3, 6, -5]
```

```
#Question no 21:- Write a code that take two tuples as input and returns a new tuple containing elements that are common to both input tuple

#Answer:-


#input frist tuple.
t1 = input("Enter elements seperates by comma : ")
element1 = t1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

tuple1 = tuple(elements)
print(tuple1)
set1 = set(tuple1)

#input second tuple.
t2 = input("Enter elements seperates by comma : ")
element2 = t2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

tuple2 = tuple(elements)
print(tuple2)
set2 = set(tuple2)

#intersection of two sets

set3 = set1 & set2
tuple3 = tuple(set3)
print(f'After concatination the updated tuple which is common in both of the tuple{tuple3}')
```

```
Enter elements seperates by comma : 1,2,3,4,5,6,7,8,9
('1', '2', '3', '4', '5', '6', '7', '8', '9')
Enter elements seperates by comma : 9,10,2,5,-63,56,1,20
('9', '10', '2', '5', '-63', '56', '1', '20')
After concatination the updated tuple which is common in both of the tuple('5', '2', '1', '9')
```

```
#Question no 22:- Create ' code that prompts the user to enter two sets of integers separated by commas. Then print the intersection of thes

#Answer:-

#Input frist set
s1 = input("Enter the integrs elements seperated by comma : ")
element1 = s1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

set1 = set(elements)
print(set1)

#Input second set
s2 = input("Enter the integrs elements seperated by comma : ")
element2 = s2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

set2 = set(elements)
print(set2)

#Intersection of two sets

set3 = set1 & set2
print(f"The intersection of {set1} and {set2} is {set3}")
```

```
Enter the integrs elements seperated by comma : 1,2,2,3,4,5
{'5', '2', '1', '4', '3'}
Enter the integrs elements seperated by comma : 5,2,3,4,6,9,2
{'5', '2', '6', '4', '9', '3'}
The intersection of {'5', '2', '1', '4', '3'} and {'5', '2', '6', '4', '9', '3'} is {'5', '2', '3', '4'}
```

```
#Question no 23:- Write a code to concatenate two tuples. The function should take two tuples as input and return a new tuple containing ele

#Answer:-

#input frist tuple.
t1 = input("Enter elements seperates by comma : ")
element1 = t1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

tuple1 = tuple(elements)
print(tuple1)

#input second tuple.
t2 = input("Enter elements seperates by comma : ")
element2 = t2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

tuple2 = tuple(elements)
print(tuple2)

#concatination of two tuple

tuple3 = tuple1 + tuple2
print(f'After concatination the updated tuple which is common in both of the tuple{tuple3}')
```

```
Enter elements seperates by comma : 1,2,3,4,5
('1', '2', '3', '4', '5')
Enter elements seperates by comma : 5,2,3,9,4
('5', '2', '3', '9', '4')
After concatination the updated tuple which is common in both of the tuple('1', '2', '3', '4', '5', '5', '2', '3', '9', '4')
```

```
#Question no 24:- Develop a code that prompts the user to input two sets of strings. Then print the elements that are present in the first s

#Answer:-

#Input frist set
s1 = input("Enter the integrs elements seperated by comma : ")
element1 = s1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

set1 = set(elements)
print(set1)

#Input second set
s2 = input("Enter the integrs elements seperated by comma : ")
element2 = s2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

set2 = set(elements)
print(set2)

#Set difference

set3 = set1 - set2
print(f"The elements which are present in the frist set but not in the second set is {set3}")
```

```
Enter the integrs elements seperated by comma : manoj,dali,sangita,bandita,somnatj
{'somnatj', 'bandita', 'sangita', 'dali', 'manoj'}
Enter the integrs elements seperated by comma : manoj,sangita,subhayan
{'sangita', 'manoj', 'subhayan'}
The elements which are present in the frist set but not in the second set is {'somnatj', 'dali', 'bandita'}
```

```
#Question no 25:- Create a code that takes a tuple and two integers as input. The function should return a new tuple containing elements frc

#Answer :-

num1 = int(input("Enter the first number : "))
num2 = int(input("Enter the second number : "))
element_1 = input("Enter the element seperated by comma : ")
element = element_1.split(",")

list_1 = []

for i in element:
  list_1.append(i)

list_1.append(num1)
list_1.append(num2)

tu1 = tuple(list_1)
print(tu1)
```

```
Enter the first number : 8
Enter the second number : 5
Enter the element seperated by comma : pwskills
('pwskills', 8, 5)
```

```
#Question no 26:- Write a code that prompts the user to input two sets of characters. Then print the union of these two sets.

#Answer:-
#Input frist set
s1 = input("Enter the integrs elements seperated by comma : ")
element1 = s1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

set1 = set(elements)
print(set1)

#Input second set
s2 = input("Enter the integrs elements seperated by comma : ")
element2 = s2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

set2 = set(elements)
print(set2)

#set union

set3 = set1 | set2
print(f"The unoin of the two set is {set3}")
```

```
Enter the integrs elements seperated by comma : a,b,c,d,e,f,g,h,i,j
{'c', 'g', 'd', 'b', 'e', 'a', 'i', 'f', 'h', 'j'}
Enter the integrs elements seperated by comma : a,c,e,f,h,j,l,m
{'c', 'e', 'l', 'a', 'h', 'f', 'j', 'm'}
The unoin of the two set is {'c', 'g', 'd', 'b', 'e', 'l', 'a', 'i', 'f', 'h', 'j', 'm'}
```

```
#Question no 27:-  Develop a code that takes a tuple of integers as input. The function should return the maximum and minimum values from th

#Answer:-

#input frist tuple.
t1 = input("Enter elements seperates by comma : ")
element1 = t1.split(",")

elements = []
for element in element1:
  element2 = int(element)
  elements.append(element2)

tuple1 = tuple(elements)
print(tuple1)

maximum = max(tuple1)
minimum = min(tuple1)

print(f"The maximum elements of the given {tuple1} is {maximum}")
print(f"The minimum elements of the given {tuple1} is {minimum}")
```

```
Enter elements seperates by comma : 1,5,9,3,7,-6
(1, 5, 9, 3, 7, -6)
The maximum elements of the given (1, 5, 9, 3, 7, -6) is 9
The minimum elements of the given (1, 5, 9, 3, 7, -6) is -6
```

```
#Question no 28:- cre+te a code that defines two sets of integers. Then print the union intersection and difference of these two sets.

#Answer:-

#Input frist set
s1 = int(input("Enter the integrs elements seperated by comma : "))
element1 = s1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

set1 = set(elements)
print(set1)

#Input second set
s2 = int(input("Enter the integrs elements seperated by comma : "))
element2 = s2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

set2 = set(elements)
print(set2)

#set union

set3 = set1 |set2
print(f"The union of the two set is {set3}")

#set intersection

set4 = set1 & set2
print(f"The intersection of the two set is {set4}")

#set difference

set5 = set1 - set2
print(f"The difference of the two set is {set5}")
```

```
Enter the integrs elements seperated by comma : 1,2,3,4,5,6,7,8,9,10
{'2', '3', '1', '5', '9', '4', '6', '10', '7', '8'}
Enter the integrs elements seperated by comma : 5,7,9,11,15,6,3,9,25
{'9', '3', '5', '6', '25', '11', '7', '15'}
The union of the two set is {'2', '3', '1', '5', '9', '15', '4', '6', '10', '25', '11', '7', '8'}
The intersection of the two set is {'9', '3', '5', '6', '7'}
The difference of the two set is {'2', '1', '4', '10', '8'}
```

```
#Question no 29:-  Write a code that takes a tuple and an element as input. The function should return the count of occurrences of the given

#Answer:-

#input tuple.
t1 = input("Enter elements seperates by comma : ")
element1 = t1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

tuple1 = tuple(elements)
print(tuple1)

a = input("Enter an element : ")

count = 0
for item in tuple1:
  if a == item:
    count += 1

print(f"The count of {a} in the tuple {tuple1} is equal to {count}")
```

```
Enter elements seperates by comma : 1,2,2,3,4,5,2,2,6,7,8,2,2
('1', '2', '2', '3', '4', '5', '2', '2', '6', '7', '8', '2', '2')
Enter an element : 2
The count of 2 in the tuple ('1', '2', '2', '3', '4', '5', '2', '2', '6', '7', '8', '2', '2') is equal to 6
```

```
#Question no 30:- Develop a code that prompts the user to input two sets of strings. Then print the symmetric difference of these two sets.

#aAnswer:-

#Input frist set
s1 = input("Enter the integrs elements seperated by comma : ")
element1 = s1.split(",")

elements = []
for element in element1:
  elements.append(element.strip())

set1 = set(elements)
print(set1)

#Input second set
s2 = input("Enter the integrs elements seperated by comma : ")
element2 = s2.split(",")

elements = []
for element in element2:
  elements.append(element.strip())

set2 = set(elements)
print(set2)

#symmetric difference

set3 = set1 ^ set2
print(f"The symmetric difference of the two sets are {set3}")
```

```
Enter the integrs elements seperated by comma : a,b,c,d,e,f,g,h,i,j,k,l
{'c', 'g', 'd', 'b', 'e', 'l', 'a', 'i', 'f', 'h', 'j', 'k'}
Enter the integrs elements seperated by comma : a,c,f,g,e,r,g,h,k,u
{'r', 'c', 'g', 'e', 'u', 'a', 'f', 'h', 'k'}
The symmetric difference of the two sets are {'r', 'd', 'b', 'u', 'l', 'i', 'j'}
```

```
#Question no 31:- Write a code that takes a list of words as input and returns a dictionary where the keys are unique words and the values a

#Answer :-

#Input the list

lis1 = []
n1 = int(input("Enter the no of elemets of the list : "))

for i in range(1,n1+1):
  item1 = input(f"Enter the {i} element of the list : ")
  lis1.append(item1)
print(f"The given list is {lis1}")

word_count = {}


for word in lis1:
    if word in word_count:
        word_count[word] += 1
    else:
        word_count[word] = 1

print(f"The frequencies of the given word is {word_count}")
```

```
Enter the no of elemets of the list : 6
Enter the 1 element of the list : Apple
Enter the 2 element of the list : Banana
Enter the 3 element of the list : Apple
Enter the 4 element of the list : Orange
Enter the 5 element of the list : Banana
Enter the 6 element of the list : Apple
The given list is ['Apple', 'Banana', 'Apple', 'Orange', 'Banana', 'Apple']
The frequencies of the given word is {'Apple': 3, 'Banana': 2, 'Orange': 1}
```

```
#Question no 32 :- Write a code that takes two dictionaries as input and merges them into a single dictionary. If there are common keys the

#answer :-

#Input the frist dict
my_dict1 = {}
n = int(input("Enter the no elements of the dictionaries : "))

for i in range(1,n+1):
  key = input(f"Enter {i} key : ")
  value = input(f"Enter {i} value : ")
  my_dict1[key] = value

print(my_dict1)

#Input the second dict
my_dict2 = {}
n = int(input("Enter the no elements of the dictionaries : "))

for i in range(1,n+1):
  key = input(f"Enter {i} key : ")
  value = input(f"Enter {i} value : ")
  my_dict2[key] = value

print(my_dict2)

# Merge two dictionaries

my_dict1.update(my_dict2)
print(my_dict1)
```

```
Enter the no elements of the dictionaries : 2
Enter 1 key : name1
Enter 1 value : somnath
Enter 2 key : name2
Enter 2 value : bangita
{'name1': 'somnath', 'name2': 'bangita'}
Enter the no elements of the dictionaries : 2
Enter 1 key : name3
Enter 1 value : manoj
Enter 2 key : name4
Enter 2 value : dali
```

```
{'name3': 'manoj', 'name4': 'dali'}
{'name1': 'somnath', 'name2': 'bangita', 'name3': 'manoj', 'name4': 'dali'}
```

```
#Question No 33:-  Write a code to access a value in a nested dictionary. The function should take the dictionary and a list of keys as inpu

#Answer:-

def function(dictonary_1,list_keys):
  dictonary_value = list(dictonary_1.values())
  dictonary_keys = list(dictonary_1.keys())
  if dictonary_keys == list_keys:
    return dictonary_value
  else:
    return "The dict keys and given list keys are not same"


#Input of dictonary

dictonary = {}

n = int(input("Enter the number of Elements of The Dictonary : "))

for i in range(1,n+1):
  key = input(f"Enter the {i} key of dictonary : ")
  values = input(f"Enter the {i} values of the dictonary : ")
  dictonary[key] = values

#Input list of keys.

list_keys = []
list_element = input("Enter the keys of the dictonary seperated by comma : ")
element = list_element.split(",")

for i in element:
  list_keys.append(i)

#Function calling
function(dictonary,list_keys)
```

```
Enter the number of Elements of The Dictonary : 2
Enter the 1 key of dictonary : somnath
Enter the 1 values of the dictonary : IIT Bhubanseswar
Enter the 2 key of dictonary : bikash
Enter the 2 values of the dictonary : NIT Durgapur
Enter the keys of the dictonary seperated by comma : somnath,bikash
['IIT Bhubanseswar', 'NIT Durgapur']
```

```
#Question no 34:- Write a code that takes a dictionary as input and returns a sorted version of it based on the velue. You can choose whethe

#Answer :-

# Input the dict
my_dict = {}
n = int(input("Enter the number of elements in the dictionary: "))

for i in range(1, n + 1):
    key = input(f"Enter key {i}: ")
    value = int(input(f"Enter value {i}: "))
    my_dict[key] = value

print(f"The given dict is {my_dict}")

# Convert dictionary to a list of tuples (key, value)
items = list(my_dict.items())

n = len(items)
for i in range(n):
    for j in range(0, n - i - 1):
        if items[j][1] > items[j + 1][1]:
            items[j], items[j + 1] = items[j + 1], items[j]


sorted_dict = {k: v for k, v in items}

print(f"The sorted dict is {sorted_dict}")
```