Modify your program from Learning Journal Unit 7 to read dictionary items from a file and write the inverted dictionary to a file. You will need to decide on the following:

* How to format each dictionary item as a text string in the input file.
* How to covert each input string into a dictionary item.
* How to format each item of your inverted dictionary as a text string in the output file.

Create an input file with your original three-or-more items and add at least three new items, for a total of at least six items.

Include the following in your Learning Journal submission:

* The input file for your original dictionary (with at least six items).
* The Python program to read from a file, invert the dictionary, and write to a different file.
* The output file for your inverted dictionary.
* A description of how you chose to encode the original dictionary and the inverted dictionary in text files.

#Function for inverting the dictionary  
def invert\_dict(d):  
 inverse = dict()  
 for key in d.keys():  
 value = d[key]  
 for val in value:  
 if val not in inverse:  
 inverse[val] = [key]  
 else:  
 inverse[val].append(key)  
 return inverse  
  
#Try within the program  
d={'Hi': ['Konnichiwa', 'Hajimemashite'], 'Goodbye':['Sayonara', 'Ja Nee'],'Bathroom': ['Toire', 'Otearai'], 'Thank you': ['Arigatou','Doumo']}  
inv\_dict=invert\_dict(d)  
print("Try within the program")  
print('\nOriginal dictionary:',d)  
print('Inverted dictionary:',inv\_dict)  
dict2={}  
file=open('words.txt','r')  
print("\n-------------------------------------------------")  
print("Now try for input from a file and output to a file")  
#End of test within a file  
  
f = open("f1.txt", "r")  
s=f.read() #the data of the file is in the form of a string which is being stored in the variable s  
dc=eval(s) #The enum evaluates a string as a python expression  
#So here as the input string is actually a dictionary, it will be stored in d  
f.close()  
print("\nOriginal Dictionary : ",dc) #printing the dictionary as read from file  
  
#function for inverting the dictionary  
inv\_d=invert\_dict(dc)  
print("Inverted Dictionary : ",inv\_d)  
f=open("f2.txt","w+") #creating output file  
f.write(str(inv\_d)) #writing the newly created inverted dictionary to the file  
f.close()

**Input from file:**

{'Hi': ['Konnichiwa', 'Hajimemashite'], 'Goodbye':['Sayonara', 'Ja Nee'],'Bathroom': ['Toire', 'Otearai'], 'Thank you': ['Arigatou','Doumo']}

**Output:**

{'Konnichiwa': ['Hi'], 'Hajimemashite': ['Hi'], 'Sayonara': ['Goodbye'], 'Ja Nee': ['Goodbye'], 'Toire': ['Bathroom'], 'Otearai': ['Bathroom'], 'Arigatou': ['Thank you'], 'Doumo': ['Thank you']}