Write a Python program to get all possible two digit letter combinations from a digit (1 to 9) string.    
string\_maps = {  
"1": "abc",  
"2": "def",  
"3": "ghi",  
"4": "jkl",  
"5": "mno",  
"6": "pqrs",  
"7": "tuv",  
"8": "wxy",  
"9": "z"  
}  
============================================================ Write a Python function that takes a sequence of numbers and determines if all the numbers are different from each other.

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Write a Python program to convert the string to a list and print all the words and their frequencies.

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Write a Python function that takes a list of words and returns the length of the longest one.

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Write a Python program that accepts a comma separated sequence of words as input and prints the unique words in sorted form (alphanumerically).    
Sample Words : red, white, black, red, green, black  
Expected Result : black, green, red, white,red============================================================

Write a Python function that takes two lists and returns True if they have at least one common member.

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Write a Python program to find the second smallest number in a list.

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Write a Python program to get the frequency of the elements in a list.

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Write a Python program to create a list by concatenating a given list which range goes from 1 to n.    
Sample list : ['p', 'q']  
n =5  
Sample Output : ['p1', 'q1', 'p2', 'q2', 'p3', 'q3', 'p4', 'q4', 'p5', 'q5']

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Write a Python program to convert a list of multiple integers into a single integer.    
Sample list: [11, 33, 50]  
Expected Output: 113350

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Write a Python program to compute the similarity between two lists.   
Sample data: ["red", "orange", "green", "blue", "white"], ["black", "yellow", "green", "blue"]  
Expected Output:   
Color1-Color2: ['white', 'orange', 'red']  
Color2-Color1: ['black', 'yellow']

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Write a Python script to add a key to a dictionary.

Sample Dictionary : {0: 10, 1: 20}  
Expected Result : {0: 10, 1: 20, 2: 30}

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Write a Python script to concatenate following dictionaries to create a new one.

Sample Dictionary :   
dic1={1:10, 2:20}   
dic2={3:30, 4:40}   
dic3={5:50,6:60}  
Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}

============================================================

Write a Python program to combine two dictionary adding values for common keys.   
d1 = {'a': 100, 'b': 200, 'c':300}  
d2 = {'a': 300, 'b': 200, 'd':400}  
Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})

============================================================

Write a Python program to get the top three items in a shop.    
Sample data: {'item1': 45.50, 'item2':35, 'item3': 41.30, 'item4':55, 'item5': 24}  
Expected Output:   
item4 55  
item1 45.5  
item3 41.3

============================================================

Write a Python program to convert temperatures to and from celsius, fahrenheit.   
[ Formula : c/5 = f-32/9 [ where c = temperature in celsius and f = temperature in fahrenheit ]   
Expected Output :   
60°C is 140 in Fahrenheit  
45°F is 7 in Celsius

Write a Python program to guess a number between 1 to 9.    
Note : User is prompted to enter a guess. If the user guesses wrong then the prompt appears again until the guess is correct, on successful guess, user will get a "Well guessed!" message, and the program will exit.

Write a Python program that accepts a hyphen-separated sequence of words as input and prints the words in a hyphen-separated sequence after sorting them alphabetically.   
Sample Items : green-red-yellow-black-whiteExpected Result : black-green-red-white-yellow

 Write a Python script to display the -    
a) Current date and time  
b) Current year  
c) Month of year  
d) Week number of the year  
e) Weekday of the week  
f) Day of year  
g) Day of the month  
h) Day of week

Write a Python class named Rectangle constructed by a length and width and a method which will compute the area of a rectangle.

Write a Python program to count the frequency of words in a file.

Create a class –

**class** **BankAccount**:

**def** **\_\_init\_\_**(self):

self**.**balance **=** 0

**def** **withdraw**(self, amount):

self**.**balance **-=** amount

**return** self**.**balance

**def** **deposit**(self, amount):

self**.**balance **+=** amount

**return** self**.**balance

Create derived class –

**class** **MinimumBalanceAccount**(BankAccount):

**def** **\_\_init\_\_**(self, minimum\_balance):

BankAccount**.**\_\_init\_\_(self)

self**.**minimum\_balance **=** minimum\_balance

**def** **withdraw**(self, amount):

#overirse method to show message less balance if tried to withdraw less than min balance

Test **MinimumBalanceAccount** by creating its object and invoke **withdraw** operation

Solution: withdraw method code -

**if** self**.**balance **-** amount **<** self**.**minimum\_balance:

**print** 'Sorry, minimum balance must be maintained.'

**else**:

BankAccount**.**withdraw(self, amount)

BankAccount**.**withdraw(self, amount)

Create following userdefined exception and test it – solution provided here-

class userexecption(Exception):

def \_\_init\_\_(self, value):

self.value = value

try:

raise userexecption("Error is occured")

except userexception as u:

print u.value

Modify MinimumBalanceAccount class created earlier to raise LessBalanceError. Implement LessBalanceError user defined exception and handle it in your program.

Create a employeemangement class using sqlite3 database to perform insert,update, delete find operation on employee objects. Use other program to test these functionalities.