

**1. Implement a `group_by_owners` function that:**

- Accepts a dictionary containing the file owner name for each file name.
- Returns a dictionary containing a list of file names for each owner name, in any order.

For example, for dictionary {'Input.txt': 'Randy', 'Code.py': 'Stan', 'Output.txt': 'Randy'} the `group_by_owners` function should return {'Randy': ['Input.txt', 'Output.txt'], 'Stan': ['Code.py']}.

**2. A palindrome is a word that reads the same backward or forward.**

Write a function that checks if a given word is a palindrome. Character case should be ignored.

For example, `is_palindrome("Deleveled")` should return `True` as character case should be ignored, resulting in "deleveled", which is a palindrome since it reads the same backward and forward.

**3. What is the function to convert string to integer?**

**4. What are the supported data types in Python?**

**5. What is the difference between tuples and lists in Python?**

**6. How will you convert a string to a long in python?**

**7. How will you capitalizes first letter of string?**

**8. Explain Inheritance in Python with an example.**

**9. Write a one-liner that will count the number of capital letters in a file. Your code should work even if the file is too big to fit in memory.**

**10. Write your own function to sort the numbers in a given list.**

**11. Explain copy, shallow copy and deep copy. With examples.**

**12. Choose one from `map`, `reduce`, `filter` to solve the below problem and write code.**

**Problem1:** Find the square of each number in the given list. List1 = [2,4,9,7,1,0]

**Problem2:** From the given list of strings skills = ["c,linux,python,java","c,linux,python,oracle","c,linux,python,oracle","c,linux,python,oracle","python,java,oracle"], list the elements which is having "java".

**Problem1:** Find the multiplication of all the given numbers of a given list [2,4,5,7,1.2,6,7]

**13. Which of the following is an invalid statement?**

- a) `abc = 1,000,000`
- b) `a b c = 1000 2000 3000`
- c) `a,b,c = 1000, 2000, 3000`
- d) `a_b_c = 1,000,000`

**14. What is object oriented programming? Write in your own words**

**14. Write a Python program to count the number of lines in a text file.**

**15. What is Index Out Of Range Error?**

**16. Write a program to convert a list of integers to a comma separated string?**

**17. What is List Comprehension? Give an Example.**

**18. Write a function to take two file names (file1.txt and file2.txt), remove file2.txt lines from file1.txt and write output file.**