

Problem #1	
Implement a <i>group_by_owners</i> function that: <ul style="list-style-type: none"> <li>Accepts a dictionary containing the file owner name for each file name.</li> <li>Returns a dictionary containing a list of file names for each owner name, in any order.</li> </ul> For example, for dictionary {'Input.txt': 'Randy', 'Code.py': 'Stan', 'Output.txt': 'Randy'} the <i>group_by_owners</i> function should return {'Randy': ['Input.txt', 'Output.txt'], 'Stan': ['Code.py']}.	

**Solution:-**

<https://replit.com/@shruthi26/groupbyowners#main.py>

**Output**

```
Owners of the files : ['shruthi', 'Manvith']
Type of files : ['input.txt', 'output.txt', 'code.txt']

---Details on files owned by the owners---

{'shruthi': ['input.txt'], 'Manvith': ['output.txt', 'code.txt']}
```

Problem #2	
Write a function that checks if a given word is a palindrome. Character case should be ignored.	

**Solution:-**

<https://replit.com/@shruthi26/palindrome#main.py>

**Output**

```
Enter the string: Madam
Madam is a palindrome

Enter the string: Charles
Charles is not a palindrome
```

Problem #3	
Write a function to parse a log file & extract details of Errors & Warnings recorded into a separate file.	

**Solution:-**

<https://replit.com/@shruthi26/log#main.py>

The screenshot shows a Replit environment with the username 'shruthi26' and the project name 'log'. The file explorer on the left lists 'main.py', 'Error\_file.log', 'log\_file.log' (selected), and 'warning\_file.log'. The main editor displays the contents of 'log\_file.log' with the following text:

```
1 INFO - Starting to Wait for Files
2 INFO - Starting: Attempt 1 Checking for New Files from
  gs://folder/folder/
3 ERROR - Failed: Waiting for files the Files from Cloud
  Storage: gs://folder/folder/
4 WARNING - Directory got changed
```

The screenshot shows the same Replit environment with 'warning\_file.log' selected in the file explorer. The main editor displays the contents of 'warning\_file.log' with the following text:

```
1 WARNING - Directory got changed
```

**Output**

The screenshot shows the same Replit environment with 'Error\_file.log' selected in the file explorer. The main editor displays the contents of 'Error\_file.log' with the following text:

```
1 ERROR - Failed: Waiting for files the Files from Cloud
  Storage: gs://folder/folder/
2
```

Problem #4	
<p>Write a function that provides a change directory (cd) function for an abstract file system.</p> <p><b>Notes:</b></p> <p>Root path is '/'.  Path separator is '/'.  Parent directory is addressable as '..'.  Directory names consist only of English alphabet letters (A-Z and a-z).  The function should support both relative and absolute paths.  The function will not be passed any invalid paths.  Do not use built-in path-related functions.</p> <p><b>For example:</b></p> <pre>path = Path('/a/b/c/d') path.cd('../x') print(path.current_path)</pre> <p><b>Output:</b></p> <p>Should display '/a/b/c/x'.</p>	

**Solution:-**

<https://replit.com/@shruthi26/changedirectory#main.py>

**Output**

```
The current directory of the file - /home/shruthi/programs
Do you want to change directory (Y/N) ? N
You are continuing to work in the directory path : /home/shruthi/programs
```

```
The current directory of the file - /home/shruthi/programs
Do you want to change directory (Y/N) ? Y
enter the new path : /PROGRAMS/X/@PYTHON-CLASS/DIRECTORY
The changed directory of the file - /PROGRAMS/X/@PYTHON-CLASS/DIRECTORY
```

```
The current directory of the file - /home/shruthi/programs
Do you want to change directory (Y/N) ? M
Enter valid choice (Y/N)
```

**Problem #5:**

Design & develop a web application to maintain records of students.

The single the record shall contain the following information:

| Name | Roll number | Age | Gender |

The application should have the ability to INSERT, DELETE, UPDATE & SEARCH records.

**Please Note:** this application should not use any DATABASE.

**Solution:-**

<https://replit.com/@shruthi26/stddata#main.py>

**Output**

```
Enter the New name of the student: Asha
1
List after updation
Name   : Asha
RollNo : 200
Age    : 26
Gender : F

Enter choice:1
Enter the name of the student to be inserted: Shashi
Enter the Roll number: 300
Enter the Age: 34
Enter the gender M/F: M
Enter choice:2

List of Students

Name   : Asha
RollNo : 200
Age    : 26
Gender : F

Name   : Shashi
RollNo : 300
Age    : 34
Gender : M
```