Problem #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']}*.	

Solution:-

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:-

Output

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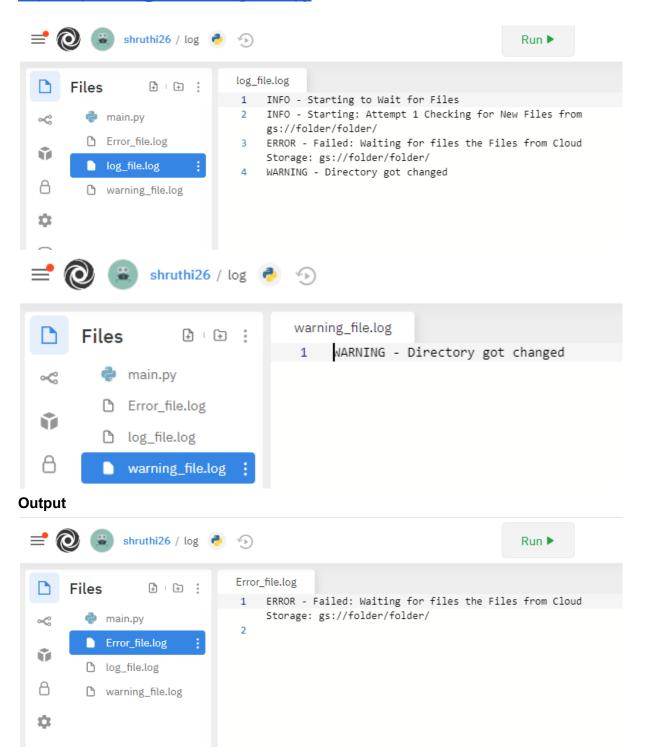
```
Enter the string: Charles
Charles  is not a palindrome
```

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

Solution:-

Output

Problem #4	

Write a function that provides a change directory (cd) function for an abstract file system.

Notes:

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.

For example:

path = Path('/a/b/c/d')

path.cd('../x')

print(path.current_path)

Output:

Should display '/a/b/c/x'.

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          Q ×
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          Activate Windows
```