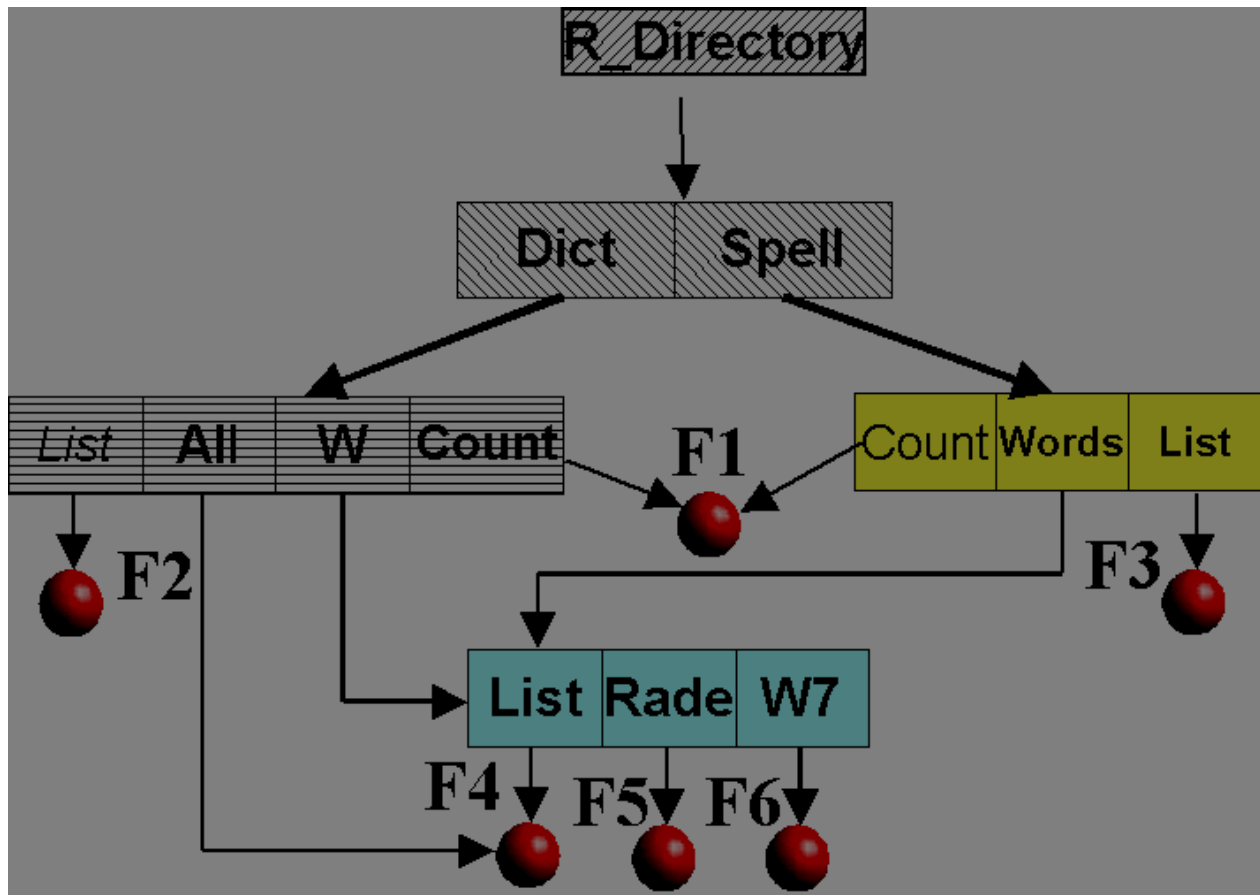


# Exercise 10

Student's Name and ID: s1240078 Tomonori Masubuchi

**Exercise 1.** In your own directory create the following Acyclic-Graph Directory Structure:



Show the sequence of UNIX-commands realizing this directory.

**Put your answer here.**

**mkdir R\_Directory**

**mkdir R\_Directory/Dict**

**mkdir R\_Directory/Spell**

**mkdir R\_Directory/Dict/List**

**mkdir R\_Directory/Dict/All**

**mkdir R\_Directory/Dict/W**

**mkdir R\_Directory/Dict/Count**

**mkdir R\_Directory/Spell/Count**

**mkdir R\_Directory/Spell/Words**

**mkdir R\_Directory/Spell/List**

**mkdir R\_Directory/Spell/Words/List**

**touch R\_Directory/Spell/Words/Rade**

**mkdir R\_Directory/Spell/Words/W7**

**touch R\_Directory/Dict/LIST/F2**

**touch R\_Directory/Dict/Count/F1**

**touch R\_Directory/Spell/List/F3**

**touch R\_Directory/Dict/All/F4**

**touch R\_Directory/Spell/Words/Rade/F5**

**touch R\_Directory/Spell/Words/W7/F6**

**In -s ~/R\_Directory/Spell/Count/F1 ~/R\_Directory/Dict/Count/F1**

**In -s ~/R\_Directory/Spell/Words/List/F4 ~/R\_Directory/Dict/w/List/F4**

**In -s ~/R\_Directory/Spell/Words/List ~/R\_Directory/Dict/W/LIST**

**In -s ~/R\_Directory/Spell/Words/Rade/ ~/R\_Directory/Dict/W/Rade**

**In -s ~/R\_Directory/Spell/Words/W7 ~/R\_Directory/Dict/W/W7**

**Exercise 2.** Explain the purpose of the Open and Close operations.

## 1. Open operation

**Put your answer here.**

To prepare a file to be referenced

## 2. Close operation

**Put your answer here.**

to prevent reference to a file until it is reopened.

**Exercise 3.** Consider a system that supports 5000 users. Suppose you want to allow 4990 of these users to be able to access one file.

### 1. How would you specify this protection scheme in UNIX?

**Put your answer here.**

○create an access control list with names of all 4990 users. And put these users in one group. Finally set the group access.

### 2. Could you suggest another protection scheme that can be used more effectively for this purpose than the scheme provided by UNIX?

**Put your answer here.**

make a group , add 10 of users cannot access the file and change the permission of the file.

**Exercise 4.** Give an example of an application in which data in a file should be accessed in the following order:

#### a. Sequentially

**Put your answer here.**

video and/or audio streaming  
log files  
copy or download files  
compare files

#### b. Randomly

**Put your answer here.**

**database**

**image**

**editor**

**video**

**editer**