

Week 3 - Live Sessions

Problem 1

Pre-pend the contents of `file1.txt` to `file2.txt`. That is, the contents of `file2.txt` should be the contents of `file1.txt` followed by `file2.txt`.

Solution

```
cat file1.txt file2.txt > file3.txt
cat file3.txt > file2.txt
rm file3.txt
```

Problem 2

Redirect the stderr and stdout of the `ls file1.txt file2.txt` command in that particular order to `output.txt`

Solution

```
ls file1.txt file2.txt 2> output.txt 1>>output.txt
```

Problem 3

Suppose, in some task, you have to count the number of occurrences of a certain word in a lot of files and store it in the variable `ct`. The value of `ct` should be initialized to 0, at the beginning and the number of words stored in the variable `words` is to be added. Achieve this task in just one line.

Solution

```
ct=$(( ${ct:=0} + words ))
```

Problem 4

The employee ID of a certain company is in the following format: `DDYYPPXXX` where - `DD` stands for department; ex: FN for Finance, SD for Software Development - `YY` stands for work experience - `P` stands for position; M for Manager, etc. - `XXX` stands for ID number.

Given a Employee ID, redirect just the Department and the ID Number to `output.txt`.

Solution

```
echo ${id1:0:2}${id1: -3:3} > output.txt
echo ${id2:0:2}${id2: -3:3} >> output.txt
echo ${id3:0:2}${id3: -3:3} >> output.txt
```

Problem 5

The variable `filename` has name of file along with extension. Find the file extension and display.

Solution

```
echo ${filename##*.}
```

Problem 6

Write a script to redirect the manual entry for a command which is specified via variable "command" to a text file `man_command.txt` (example: if the command is `ls`, then `man_ls.txt`) and redirect the standard error to `man_command.err`. If there is any error, execute the help command and redirect the output to `man_command.txt`

Prefix

```
command="fg"
```

Solution

```
man $command 1> man_$command.txt 2> man_$command.err || help $command > man_$command.txt
```

Problem 7

Write a script to redirect the stderr of a command which is specified via variable "command" to a text file `error.txt` and print the std out only if there is no error.

Prefix

```
command="cat qq.txt"
echo "hello world" >qq.txt
```

Solution

```
$command 1>temp.txt 2> error.txt && cat temp.txt
```