

CODE-HOUR 23/3/2021

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**A SMALL PIECE OF BASH  
CODE TO REDUCE YOUR  
MANUAL WORKLOAD**

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# INTRODUCING A PROBLEM

- ▶ You have a file called “workflow1.py” that you need to make 100 versions of (“workflow2.py”, ..., “workflow100.py”)
- ▶ In the different versions of the file the words “Round” and “grouping” will appear. These words should be followed by the number corresponding to the workflow number

“workflow1.py” -> “workflow2.py”

“Round1” -> “Round2”

“grouping1” -> “grouping2”

- ▶ **Manual solution:** Duplicate the “workflow1.py” file, open it in a text-editor, use the replace all commands to replace “Round1” with “Round2”, “grouping1” with “grouping2”, then save and rename as “workflow2.py”

**Then repeat 100 times!!!!**



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## A SMALL AND SIMPLE BASH SCRIPT TO SOLVE THE PROBLEM

```
less AutomaticGenerationOfWorkflows.sh
```

```
for i in `seq 1 99`; do
```

```
cp "workflow1.py" "workflow${i+1}.py"
```

```
sed "s/Round1/Round${i+1}/g" workflow${i+1}.py > workflow${i+1}_.py
```

```
sed "s/grouping1/grouping${i+1}/g" workflow${i+1}_.py > workflow${i+1}__.py
```

```
mv workflow${i+1}__.py workflow${i+1}.py
```

```
rm workflow${i+1}_.py;
```

```
done
```

## A SMALL AND SIMPLE BASH SCRIPT TO SOLVE THE PROBLEM

```
CodeHour — CathrineKiel@x86_64-apple-darwin13 — ../PhD/CodeHour — -zsh — 80x24
Last login: Wed Mar 17 08:50:02 on ttys001
(base) → ~ cd /Users/CathrineKiel/Desktop/PhD/CodeHour
(base) → CodeHour ls
AutomaticGenerationOfWorkflows.sh Code hour March2021.key
BirthdayCards.sh GatherFiles.sh
BirthdayDraft.txt workflow1.py
(base) → CodeHour ls
AutomaticGenerationOfWorkflows.sh Code hour March2021.key
BirthdayCards.sh GatherFiles.sh
BirthdayDraft.txt workflow1.py
(base) → CodeHour less workflow1.py

(base) → CodeHour
```

# ALTERNATIVE USES

- Making birthday invitations personally addressed to your guests



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# BIRTHDAY CODE

```
less BirthdayCards.sh
```

```
for i; do
```

```
cp "BirthdayDraft.txt" "BirthdayDraft$i.txt"
```

```
sed "s/Name/$i/g" "BirthdayDraft$i.txt" > "BirthdayDraft_$i.txt"
```

```
rm "BirthdayDraft$i.txt"
```

```
done
```

```
./BirthdayCards.sh mom dad sister1 sister2 sister3 brother
```

**BASH MIGHT BE A BAD PROGRAMMING  
LANGUAGE BUT SURE IS GOOD FOR FILE  
MANIPULATION AND REPETITIVE TASKS**

<https://github.com/cks2903/CodeHour>