

```
#!/bin/bash

# A nano script

echo "March 7th is doing the work for you"

# basename mean to removes the folder path for example unorganized/vivi.jpg to vivi.jpg
# extension="{filename##*}" mean removes everything up to the last dot like this ${variable##pattern}
# for example, vivi.jpg to jpg
for file in unorganized/*; do

    filename=$(basename "$file")
    extension="{filename##*}"

    # we will decide folder based on extension
    if [[ "$extension" == "txt" ]]; then
        folder="texts"
    elif [[ "$extension" == "jpg" || "$extension" == "png" ]]; then
        folder="images"
    elif [[ "$extension" == "pdf" ]]; then
        folder="documents"
    else
        folder="others"
    fi

    # create folder if it doesn't exist
    mkdir -p "$folder"

    mv "$file" "$folder/"

    # print logs
    echo "Moving $filename to $folder/"
```

done

echo "March finished the work!"

```
16   for file in unorganized/*; do
17       filename=$(basename "$file")
18       extension="${filename##*}."
19
20       # we will decide folder based on extension
21       if [[ "$extension" == "txt" ]]; then
22           folder="texts"
23       elif [[ "$extension" == "jpg" || "$extension" == "png" ]]; then
24           folder="images"
25       elif [[ "$extension" == "pdf" ]]; then
26           folder="documents"
27       else
28           folder="others"
29       fi
30
31       # create folder if it doesn't exist
32       mkdir -p "$folder"
33       mv "$file" "$folder/"
34
35       # print logs
36       echo "Moving $filename to $folder/"
37   done
38
39   echo "March finished the work!"
```

(Picture version) <https://github.com/chaianunSaku/syskills/blob/main/ex3/organize.sh>

```
onglee@LAPTOP-S1DQN0HU: X + v
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ls
documents images organize.sh texts unorganized
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd documents/
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/documents$ ls
dsoop.pdf numcom.pdf
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/documents$ cd ..
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ git fetch origin
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ git reset --hard origin/main
HEAD is now at d434c8d update organize to be completed
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ git clean -fd
Removing documents/dsoop.pdf
Removing documents/numcom.pdf
Removing texts/LANY.txt
Removing texts/NIKI.txt
Removing texts/file1.txt
Removing texts/m7.txt
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ls
documents images organize.sh texts unorganized
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd texts
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ ls
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ cd ..
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd unorganized/
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/unorganized$ ls
LANY.txt NIKI.txt Onrisa.jpg dsoop.pdf file1.txt m7.txt numcom.pdf onrie.jpg saku.jpg vivi.jpg
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/unorganized$ cd ..
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ls
documents images organize.sh texts unorganized
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd texts
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ ls
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ |
```

Inside “unorganized” folder there are total of 10 files. The other folders don’t have any files initially.

Now let’s run the script.

```
onglee@LAPTOP-S1DQN0HU: X + v
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ nano organize.sh
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ls
documents images organize.sh texts unorganized
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ./organize.sh
March 7th is doing the work for you
Moving LANY.txt to texts/
Moving NIKI.txt to texts/
Moving Onrisa.jpg to images/
Moving dsoop.pdf to documents/
Moving file1.txt to texts/
Moving m7.txt to texts/
Moving numcom.pdf to documents/
Moving onrie.jpg to images/
Moving saku.jpg to images/
Moving vivi.jpg to images/
March finished the work!
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ ls
documents images organize.sh texts unorganized
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd documents/
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/documents$ ls
dsoop.pdf numcom.pdf
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/documents$ cd ..
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd images/
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/images$ ls
Onrisa.jpg onrie.jpg saku.jpg vivi.jpg
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/images$ cd ..
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3$ cd texts
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ ls
LANY.txt NIKI.txt file1.txt m7.txt
onglee@LAPTOP-S1DQN0HU:~/syskills/ex3/texts$ |
```

./organize.sh to run the script.

March 7th is doing the work for you

Moving LANY.txt to texts/

Moving NIKI.txt to texts/

Moving Onrisa.jpg to images/

Moving dsoop.pdf to documents/

Moving file1.txt to texts/

Moving m7.txt to texts/

Moving numcom.pdf to documents/

Moving onrie.jpg to images/

Moving saku.jpg to images/

Moving vivi.jpg to images/

March finished the work!

As you can see the files like .txt moved correctly into their respective folders.

let me explain the script

```
for file in unorganized/*; do
```

```
    filename=$(basename "$file")
```

```
    extension="${filename##*.}"
```

basename mean to removes the folder path for example unorganized/vivi.jpg to vivi.jpg

extension="\${filename##\*.}" mean removes everything up to the last dot like this \${variable##pattern}

for example, vivi.jpg to jpg

```
    if [[ "$extension" == "txt" ]]; then
```

```
        folder="texts"
```

```
    elif [[ "$extension" == "jpg" || "$extension" == "png" ]]; then
```

```
        folder="images"
```

```
elif [[ "$extension" == "pdf" ]]; then
    folder="documents"
else
    folder="others"
fi
```

this is the condition to match the \$extension, for example if our extension == "txt" then folder will be "texts"

```
# create folder if it doesn't exist
mkdir -p "$folder"
mv "$file" "$folder/"

# print logs
echo "Moving $filename to $folder/"
done
```

if the file doesn't match then it will go to "others" folder and we will create a new directory for it. This happens every iteration if it detects no matches.

mkdir -p ensures the folder exists (creates it if missing)

Then it will move the file to the respective folder by using mv "\$file" "\$folder/"