

2. Create a make file that has the following behaviour when invoked as given below.

make	Output the usage pattern as help
make list	Recursively list all files in the current directory modified in the last n days
make backup	Copy all the files listed as above to a temporary directory and create a tar file for it. Name of the tar file shall be like backup-31May2021.tar if the command was invoked on 31 st May, 2021.

The value of n for the number of days should be configurable using a shell variable \$MODPERIOD. Default can be taken as 5 days. Except to copy the Makefile to a directory, the user is not expected to give any further input by hand. [5 Marks]

Output required: The code, screenshots showing its behaviour.

Application: One can place scripts in the cron directory to run them automatically at certain times. One can have a script there to back up the files that are being currently worked on to avoid accidental deletion.

Link to the GitHub repository for this question: [GitHub](#)

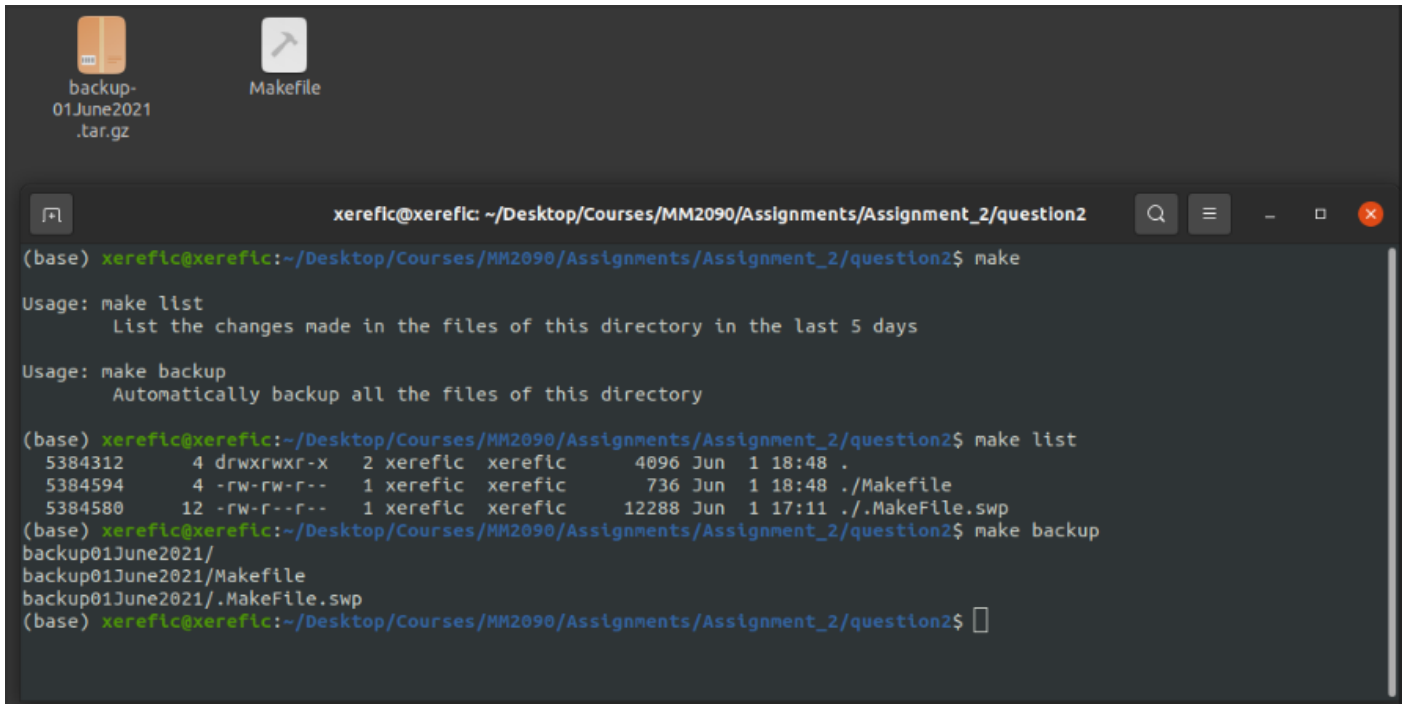
The make file takes automatically backs up the files edited in the last n days (5 days by default) and compresses it.

```

1. ifndef MODPERIOD
2.     MODPERIOD=5
3. endif
4.
5. DATE=`date | cut -d " " -f 2,3,4 | sed 's/ //g'`
6.
7. default:
8.     @echo
9.     @echo "Usage: make list"
10.    @echo "\tList the changes made in the files of this directory in the last $(MODPERIOD) days"
11.    @echo
12.    @echo "Usage: make backup"
13.    @echo "\tAutomatically backup all the files of this directory"
14.    @echo
15.
16. list:
17.    @find $(pwd) -mtime -$(MODPERIOD) -ls
18.
19. backup:
20.    @rm -f backup-$(DATE).tar
21.    @rm -rf ~/backup/backup$(DATE)/
22.    @mkdir ~/backup/backup$(DATE)
23.    @chmod 777 ~/backup/backup$(DATE)/
24.
25.    @cp -r `find $(pwd) -mtime -$(MODPERIOD)` ~/backup/backup$(DATE)/
26.    @cp -r ~/backup/backup$(DATE)/ ./backup$(DATE)/
27.    @rm -r ~/backup/backup$(DATE)/
28.
29.    @tar cvfz backup-$(DATE).tar.gz backup$(DATE)/
30.
31.    @rm -r ./backup$(DATE)/
32.

```

TERMINAL:



```
xereflc@xereflc: ~/Desktop/Courses/MM2090/Assignments/Assignment_2/question2
(base) xereflc@xereflc:~/Desktop/Courses/MM2090/Assignments/Assignment_2/question2$ make

Usage: make list
List the changes made in the files of this directory in the last 5 days

Usage: make backup
Automatically backup all the files of this directory

(base) xereflc@xereflc:~/Desktop/Courses/MM2090/Assignments/Assignment_2/question2$ make list
5384312      4 drwxrwxr-x   2 xereflc  xereflc    4096 Jun  1 18:48 .
5384594      4 -rw-rw-r--   1 xereflc  xereflc     736 Jun  1 18:48 ./Makefile
5384580     12 -rw-r--r--   1 xereflc  xereflc   12288 Jun  1 17:11 ../MakeFile.swp
(base) xereflc@xereflc:~/Desktop/Courses/MM2090/Assignments/Assignment_2/question2$ make backup
backup01June2021/
backup01June2021/Makefile
backup01June2021/MakeFile.swp
(base) xereflc@xereflc:~/Desktop/Courses/MM2090/Assignments/Assignment_2/question2$
```