

Assignment 2

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Source codes are in “tarDirs” file.

Because I compile that file in Windows, so it might cannot run in Linux or Unix directly.

My code can divided into 2 parts.

The 1st part is get the target directory and archive directory.

```
1  #!/bin/bash
2  #get the target directory and archive directory - Kuo Han(#110039034)
3  if [ ! -n "$3" ]
4  then
5      if [ ! -n "$1" ];
6      then
7          tarPath=$(dirname $( readlink -f "$0"))
8          arcPath=$tarPath
9          echo "1 target Path is $tarPath"
10         echo "2 archive Path is $arcPath"
11     else
12         tarPath=$(dirname $( readlink -f "$0"))
13         arcPath=$2
14         echo "3 target Path is $tarPath"
15         echo "4 archive Path is $arcPath"
16     fi
17 else
18     if test $3 = "-a"
19     then
20         tarPath=$2
21         arcPath=$4
22         echo "5 target Path is $tarPath"
23         echo "6 archive Path is $arcPath"
24     else
25         tarPath=$4
26         arcPath=$2
27         echo "7 target Path is $tarPath"
28         echo "8 archive Path is $arcPath"
29     fi
30 fi
31
32
```

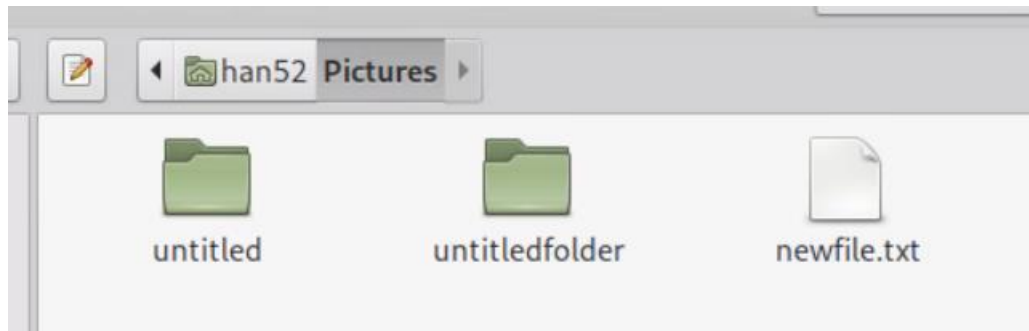
The format of the command should be “./tarDirs [-t target-directory] <-a archive-directory>”, the script arguments can be in any order, it can also be called as “./tarDirs <-a archive-directory> [-t target-directory]”.

The 2nd part is zipping all directories.

```
32
33  date=`date +%b%d%Y`
34  #get Month+Day+Year
35
36  for file_a in ${tarPath}/*
37  do
38      # get all file name in target directory
39      if test -d $file_a
40      then
41          # judge if file is directory
42          echo "9 zip directory $file_a"
43          temp_file=`basename $file_a`
44          #get directory name
45          tar -zcvPf $arcPath/$temp_file$date.tar $file_a
46          # use tar to zip folder
47      fi
48  done
49
```

Some screenshots of results.

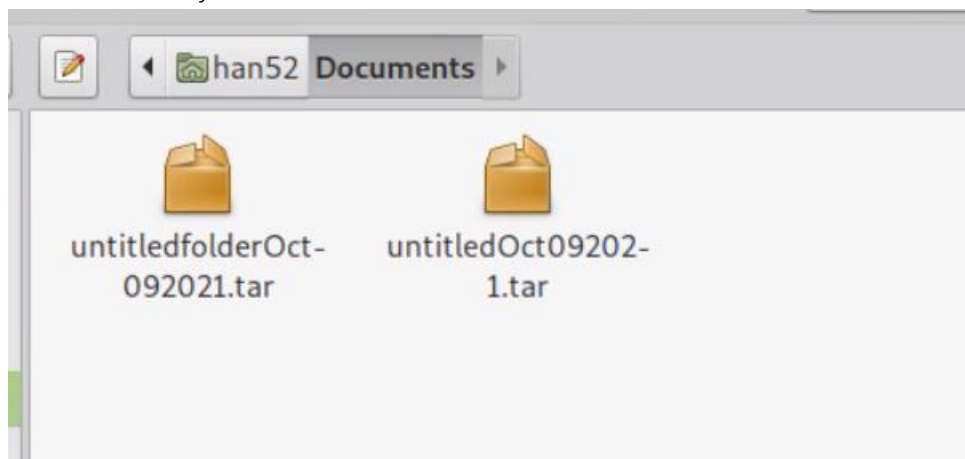
1. Target directory:



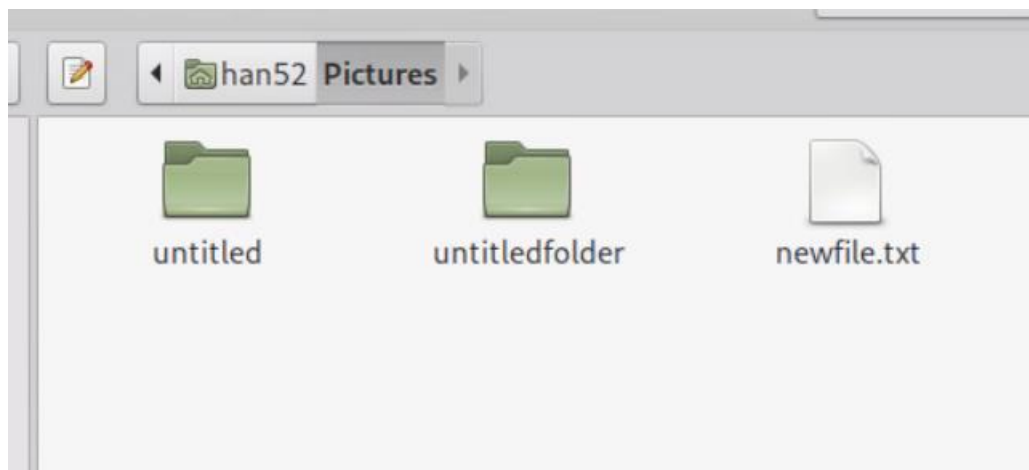
Command:

```
han52@alpha:~/Programs/Ass2$ ./tarDirs -t /home/han52/Pictures -a /home/han52/
Documents
5 target Path is /home/han52/Pictures
6 archive Path is /home/han52/Documents
9 zip directory /home/han52/Pictures/untitled
/home/han52/Pictures/untitled/
9 zip directory /home/han52/Pictures/untitledfolder
/home/han52/Pictures/untitledfolder/
/home/han52/Pictures/untitledfolder/new file
```

Archive directory:



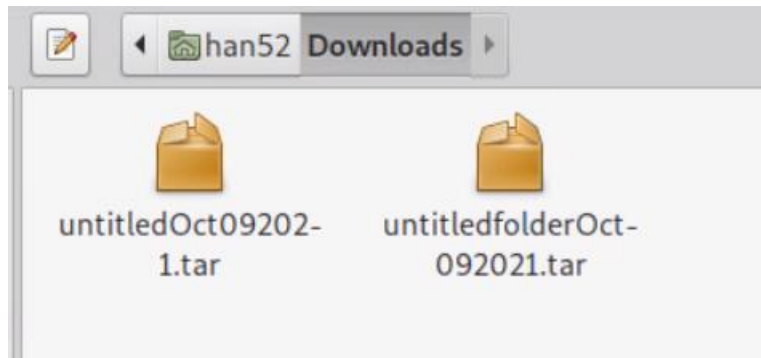
2. Target directory:



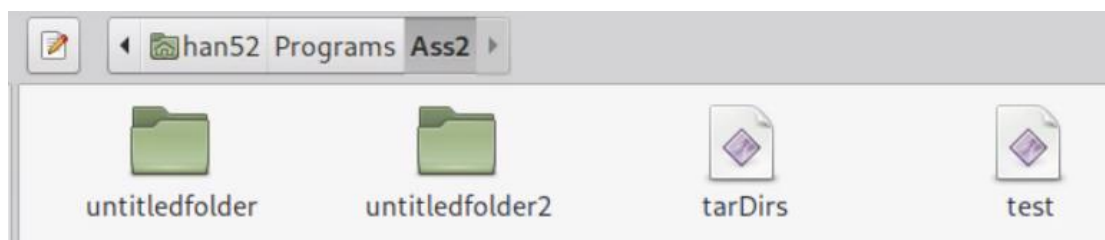
Command:

```
han52@alpha:~/Programs/Ass2$ ./tarDirs -a /home/han52/Downloads -t /home/han52/Pictures
7 target Path is /home/han52/Pictures
8 archive Path is /home/han52/Downloads
9 zip directory /home/han52/Pictures/untitled
/home/han52/Pictures/untitled/
9 zip directory /home/han52/Pictures/untitledfolder
/home/han52/Pictures/untitledfolder/
/home/han52/Pictures/untitledfolder/new file
```

Archive directory:



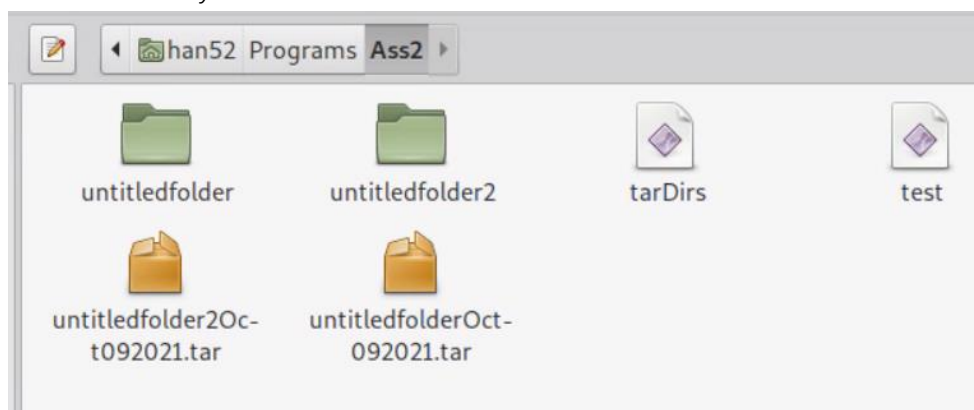
3. Target directory:



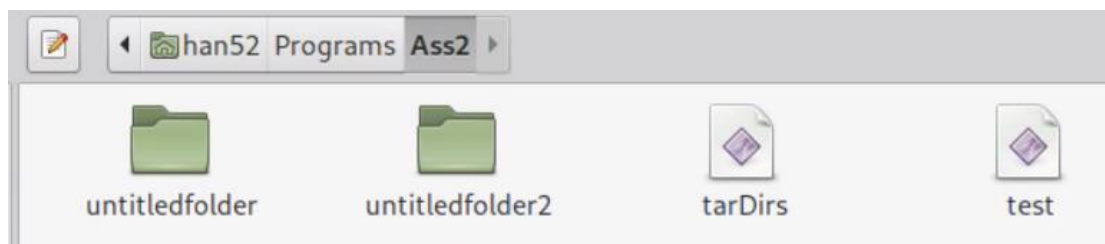
Command:

```
han52@alpha:~/Programs/Ass2$ ./tarDirs
1 target Path is /home/han52/Programs/Ass2
2 archive Path is /home/han52/Programs/Ass2
9 zip directory /home/han52/Programs/Ass2/untitledfolder
/home/han52/Programs/Ass2/untitledfolder/
9 zip directory /home/han52/Programs/Ass2/untitledfolder2
/home/han52/Programs/Ass2/untitledfolder2/
```

Archive directory:



4. Target directory:



Command:

```
han52@alpha:~/Programs/Ass2$ ./tarDirs -a /home/han52/Downloads
3 target Path is /home/han52/Programs/Ass2
4 archive Path is /home/han52/Downloads
9 zip directory /home/han52/Programs/Ass2/untitledfolder
/home/han52/Programs/Ass2/untitledfolder/
9 zip directory /home/han52/Programs/Ass2/untitledfolder2
/home/han52/Programs/Ass2/untitledfolder2/
```

Archive directory:

