1)

```
abolfazl@ubuntu01:~/BashScripting$ touch bs_01.sh
abolfazl@ubuntu01:~/BashScripting$ nano bs_01.sh
abolfazl@ubuntu01:~/BashScripting$ bash bs_01.sh
Shadow passwords are enabled.
You do NOT have permission to edit /etc/shadow.
abolfazl@ubuntu01:~/BashScripting$ cat bs_01.sh
#!/bin/bash


if [ -e /etc/shadow ]

  then
    echo "Shadow passwords are enabled."


    if [ -w /etc/shadow ]; then
        echo "You have permission to edit /etc/shadow."
    else
        echo "You do NOT have permission to edit /etc/shadow."
    fi
else
    echo "The file /etc/shadow does not exist."
fi

abolfazl@ubuntu01:~/BashScripting$
abolfazl@ubuntu01:~/BashScripting$
```

2)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_02.sh
abolfazl@ubuntu01:~/BashScripting$ sh bs_02.sh
man
bear
pig
dog
cat
sheep
abolfazl@ubuntu01:~/BashScripting$ cat sh bs_02.sh
cat: sh: No such file or directory
#!/bin/bash


animals="man bear pig  dog cat sheep"

for animal in $animals
do
        echo "$animal"

done
abolfazl@ubuntu01:~/BashScripting$
```

3)

```
abolfazl@ubuntu01:~/BashScripting$
abolfazl@ubuntu01:~/BashScripting$ sh bs_03.sh
Enter the name of a file or directory: bs_01.sh
bs_01.sh is a regular file.
-rw-rw-r-- 1 abolfazl abolfazl 310 Jun 26 08:57 bs_01.sh
abolfazl@ubuntu01:~/BashScripting$ cat bs_03.sh
#!/bin/bash


read -p "Enter the name of a file or directory: " file


if [ -e "$file" ]
    then


    if [ -f "$file" ]
        then
        echo "$file is a regular file."

    elif [ -d "$file" ]
        then
        echo "$file is a directory."

    else
        echo "$file is another type of file."
    fi


    ls -l "$file"
else
    echo "$file does not exist."
fi
```

Code

4)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_04.sh
abolfazl@ubuntu01:~/BashScripting$ nano bs_04.sh
abolfazl@ubuntu01:~/BashScripting$ bash bs_04.sh bs_03.sh
bs_03.sh is a regular file.
-rw-rw-r-- 1 abolfazl abolfazl 375 Jun 26 09:25 bs_03.sh
abolfazl@ubuntu01:~/BashScripting$ cat bs_04.sh
#!/bin/bash


if [ $# -eq 0 ]
then
    echo "Usage: $0 <file>..."



    exit 1
fi

for file in "$@"
do


    if [ -e "$file" ]
  then


        if [ -f "$file" ]
      then

            echo "$file is a regular file."


        elif [ -d "$file" ]
      then
            echo "$file is a directory."
        else
            echo "$file is another type of file."
        fi


        ls -l "$file"
    else
        echo "$file does not exist."
    fi
done
abolfazl@ubuntu01:~/BashScripting$
```

5)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_05.sh
abolfazl@ubuntu01:~/BashScripting$ sh bs_05.sh
Usage: bs_05.sh <file>
abolfazl@ubuntu01:~/BashScripting$ sh bs_05.sh bs_04.sh bs_03.sh bs_02.sh
bs_04.sh is a regular file.
-rw-rw-r-- 1 abolfazl abolfazl 454 Jun 27 06:57 bs_04.sh
bs_03.sh is a regular file.
-rw-rw-r-- 1 abolfazl abolfazl 375 Jun 26 09:25 bs_03.sh
bs_02.sh is a regular file.
-rw-rw-r-- 1 abolfazl abolfazl 102 Jun 26 09:10 bs_02.sh
abolfazl@ubuntu01:~/BashScripting$ cat bs_05.sh
#!/bin/bash


if [ $# -eq 0 ]
 then
     echo "Usage: $0 <file>"
     exit 1
fi


for file in "$@"
 do

   if [ -e "$file" ]
 then

       if [ -f "$file" ]
 then

           echo "$file is a regular file."


       elif [ -d "$file" ]; then
           echo "$file is a directory."


       else
           echo "$file is another type of file."
       fi


       ls -l "$file"
   else
       echo "$file does not exist."
   fi
done
abolfazl@ubuntu01:~/BashScripting$
```

6)

```
abolfazl@ubuntu01:~/BashScripting$ touch bs_06.sh
abolfazl@ubuntu01:~/BashScripting$ nano bs_06.sh
abolfazl@ubuntu01:~/BashScripting$ sh bs_06.sh
This script will exit with a 0 exit status.
abolfazl@ubuntu01:~/BashScripting$ cat bs_06.sh
#!/bin/bash


echo "This script will exit with a 0 exit status."


exit 0
abolfazl@ubuntu01:~/BashScripting$
```

7)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_07.sh
abolfazl@ubuntu01:~/BashScripting$ bash bs_07.sh
7
abolfazl@ubuntu01:~/BashScripting$
abolfazl@ubuntu01:~/BashScripting$
abolfazl@ubuntu01:~/BashScripting$
abolfazl@ubuntu01:~/BashScripting$ cat bs_07.sh
#!/bin/bash


file_count(){

num=$(ls -1 | wc -l)

echo "$num"
}


file_count
abolfazl@ubuntu01:~/BashScripting$
```

8)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_08.sh
abolfazl@ubuntu01:~/BashScripting$ sh bs_08.sh
1: root:x:0:0:root:/root:/bin/bash
2: daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
3: bin:x:2:2:bin:/bin:/usr/sbin/nologin
4: sys:x:3:3:sys:/dev:/usr/sbin/nologin
5: sync:x:4:65534:sync:/bin:/bin/sync
6: games:x:5:60:games:/usr/games:/usr/sbin/nologin
7: man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
8: lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
9: mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
10: news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
11: uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
12: proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
13: www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
14: backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
15: list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
16: irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
17: _apt:x:42:65534::/nonexistent:/usr/sbin/nologin
18: nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
19: systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
20: systemd-timesync:x:997:997:systemd Time Synchronization:/:/usr/sbin/nologin
21: dhcpcd:x:100:65534:DHCP Client Daemon,,,:/usr/lib/dhcpcd:/bin/false
22: messagebus:x:101:102::/nonexistent:/usr/sbin/nologin
23: systemd-resolve:x:992:992:systemd Resolver:/:/usr/sbin/nologin
24: pollinate:x:102:1::/var/cache/pollinate:/bin/false
25: polkitd:x:991:991:User for polkitd:/:/usr/sbin/nologin
26: syslog:x:103:104::/nonexistent:/usr/sbin/nologin
27: uuidd:x:104:105::/run/uuidd:/usr/sbin/nologin
28: tcpdump:x:105:107::/nonexistent:/usr/sbin/nologin
29: tss:x:106:108:TPM software stack,,,:/var/lib/tpm:/bin/false
30: landscape:x:107:109::/var/lib/landscape:/usr/sbin/nologin
31: fwupd-refresh:x:989:989:Firmware update daemon:/var/lib/fwupd:/usr/sbin/nologin
32: usbmux:x:108:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
33: sshd:x:109:65534::/run/sshd:/usr/sbin/nologin
34: abolfazl:x:1000:1000:abolfazl:/home/abolfazl:/bin/bash
abolfazl@ubuntu01:~/BashScripting$ cat bs_08.sh
#!/bin/bash


counter=1


while IFS= read -r line; do

    echo "$counter: $line"



    counter=$((counter + 1))

done < /etc/passwd
abolfazl@ubuntu01:~/BashScripting$ 
```

9)

```
abolfazl@ubuntu01:~/BashScripting$ nano bs_09.sh
abolfazl@ubuntu01:~/BashScripting$ touch mycat.jpg
abolfazl@ubuntu01:~/BashScripting$ bash bs_09.sh
Renaming completed.
abolfazl@ubuntu01:~/BashScripting$ ls
20240627mycat.jpg  bs_02.sh  bs_04.sh  bs_06.sh  bs_08.sh
bs_01.sh           bs_03.sh  bs_05.sh  bs_07.sh  bs_09.sh
abolfazl@ubuntu01:~/BashScripting$ cat bs_09.sh
#!/bin/bash

date=$(date +%Y%m%d)

shopt -s nullglob

for file in *.jpg; do

    filename="${file%.*}"

    mv "$file" "${date}${filename}.jpg"
done

shopt -u nullglob

echo "Renaming completed."
abolfazl@ubuntu01:~/BashScripting$
```

10)

به این دلیل است که در دایرکتوری که میخواهیم فایل جدید رو بسازیم فایل از قبل با همان نام وجوددارد

برای برطرف کردنش میتونیم اول بررسی کنیم ببینم اگ اون فایل وجود دارد یه نام جایگزین انتخاب کند یا اون فایل رو پاک کند و بعد دوباره مجددا بسازد