

**Lab Mid**

<b>Course Code: CL205</b>	<b>Course Name: Operating Systems Lab</b>
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<b>Student Roll No:</b>	<b>Section:</b>

***"Be willing to take a chance, because you never know how perfect something could turn out to be."***  
**BEST OF LUCK!**

Instructions

- Rules are made to break them. So, invent yours and I'll break.

**Time:** 60 minutes.

**Max Marks:** 40 points

**(5 marks)**

1. Create shortcut of the directory 'mid' which is in 'home/user/Document/OS' in '/home/user/Desktop'.

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2. Display the contents of 'file1', 'file2' and 'studentList' files.

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3. Create a write-only file in your home directory.

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4. Copy all files in the current directory whose names end in ".c" or ".h" into the subdirectory "Programs".

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5. List all files with extension '.mp3' present in a directory 'song' which is in '/home/user/Document/Music'

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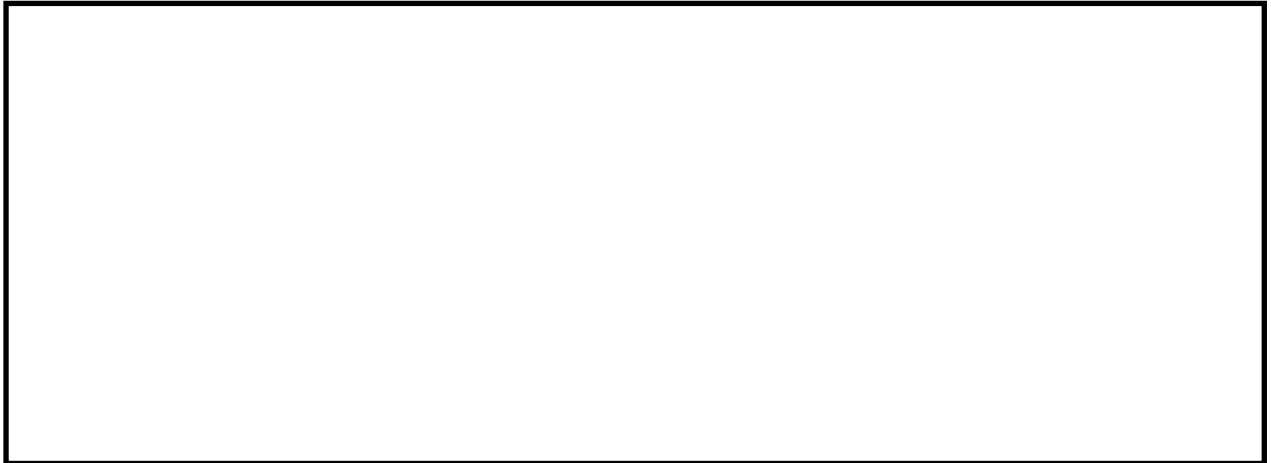
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Differentiate between "sh" and "bash".

**(2.5 marks)**

Write a shell script to rename file having extension .png to .jpeg

(3 marks)

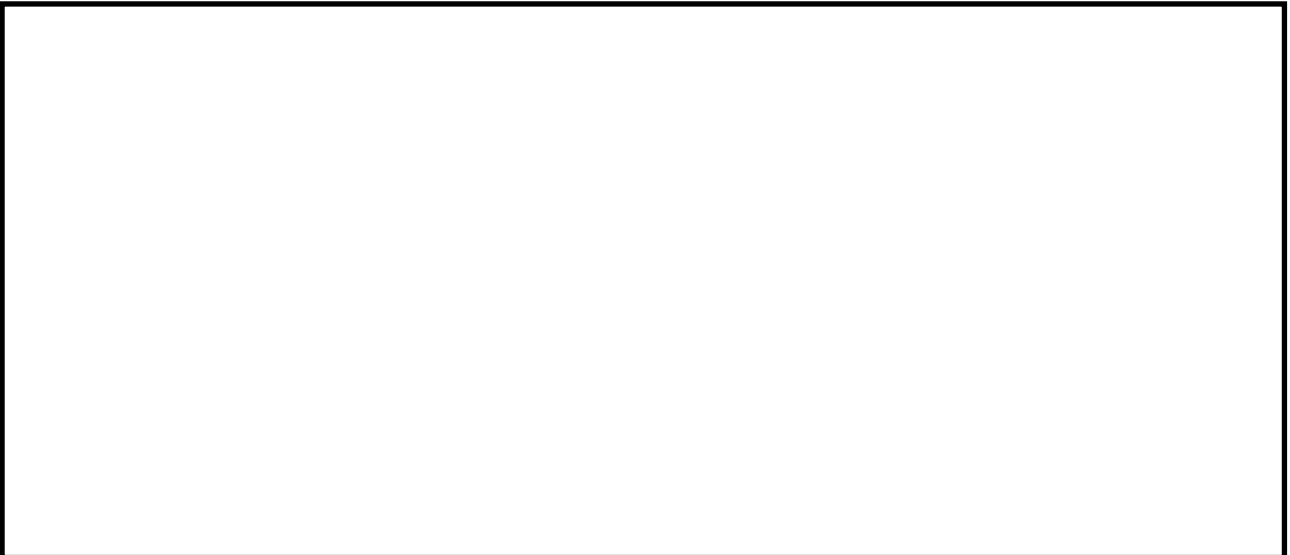


Write a function in shell scripting called plier which multiplies together a sequence of numbers.

**plier 2 6 4**

(4.5 marks)

**output: 48**

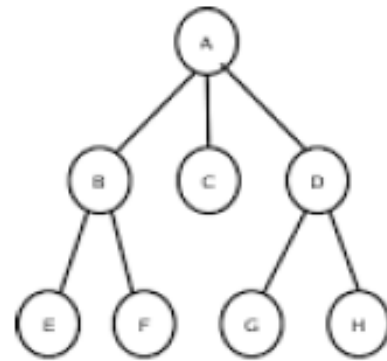


Write a shell script to list all the files of the current directory having read and write permission to the user.

(5 marks)



Write a c program for this process tree.  
Each node will print its name but by not using printf().  
**(10 marks)**



Write System calls for Shared Memory (5 marks)

- 1.
- 2.
- 3.

System call for named pipe is \_\_\_\_\_.

System call for unnamed pipe is \_\_\_\_\_.

Explain functions and their arguments:

```
msgrcv(msgid,&msg,sizeof(msg),1,0);
```

```
retval = read(fd, buffer, sizeof(buffer));
```

```
write(1, buffer, sizeof(buffer));
```

**Bonus Question:**

Write anything which proves me you are a Linux User. Bonus marks depends on your creativity.