

Lab Mid

Course Code: CL205	Course Name: Operating Systems Lab
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Student Roll No:	Section:

*"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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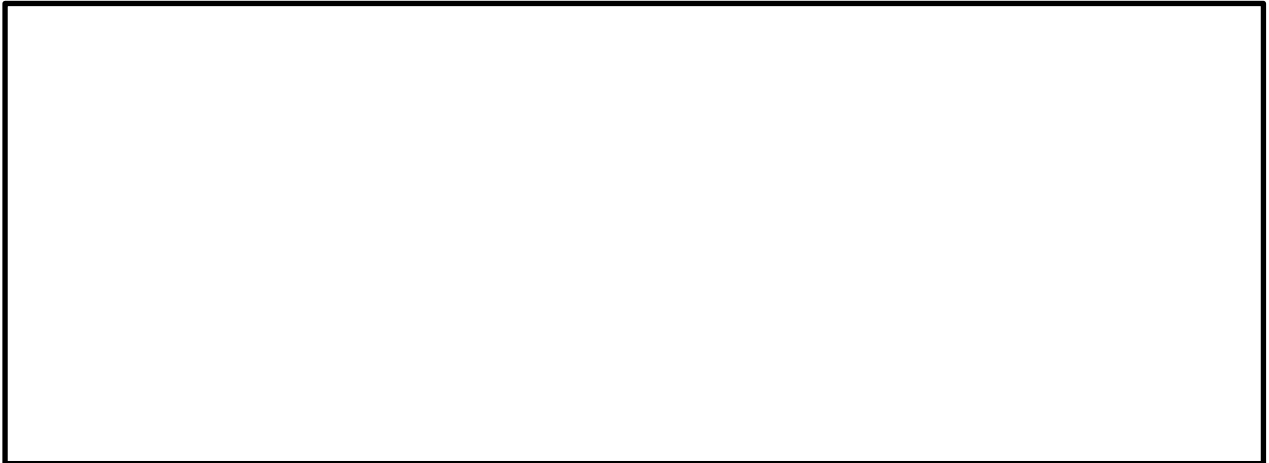
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Differentiate between "sh" and "bash".

**(2.5 marks)**

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

**(3 marks)**

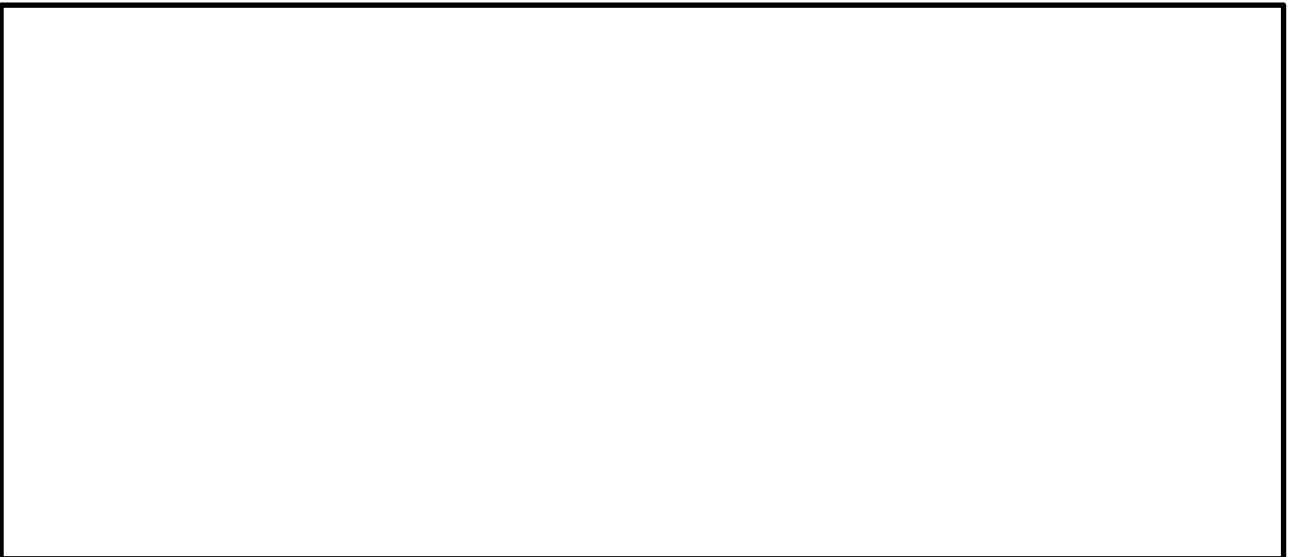


Write a function in shell scripting called plier which multiplies together a sequence of numbers.

**plier 2 6 4**

**(4.5 marks)**

**output: 48**

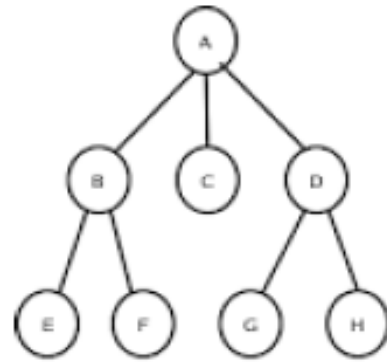


Write a shell script to list all the files of the current directory having read and write permission to the user.

**(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.