

CS242

System Programming Lab No. - 7

Objective

In this lab we learn about shell scripting.

Exercise

1. Create a shell script file called **phone.sh** that will search a file **phonebook.txt** in your current working directory. The file phonebook.txt is a CSV (comma separated value) file, where the fields are <Serial Number, Name, Designation, Phone, Email id, Room>. The script should search for a name and print out all details of the users. For example,

```
Enter the name to search: ashok (case insensitive)
```

```
Output
```

```
Full Name: Ashok Singh Sairam
```

```
Designation: Associate Professor
```

```
Phone No: 8035
```

```
Email id: ashok
```

```
Room No: 412
```

2. Accept the pattern to be searched as a command line argument. Further you should be able to search any field. For this you need a flag to tell the program which field you are searching. The flags are fn (for full name), dn (designation), pn (phone number), eid(email) and rn (room no).

For example if you run the program as

```
$sh ./phone.sh -rn 412
```

It should print the same information as in 1.

In case multiple entries match, like

```
$sh ./phone.sh -dn associate professor
```

It should print all entries that match the pattern.

3. Write a script called testfile.sh that takes a directory or file name as a command line argument. It then prints the permission that is currently set on the directory or the file. If the file/directory does not exist then display an error message appropriately.

Deliverables

Create a pdf document containing the output of your program. Next create an archive file by the name <roll number>.tar that contains the pdf document and the C program.

Mail the document to cs242@iitp.ac.in with subject "Lab <no>".

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