Assignment#3, possible solutions

Part One

1. Print all lines containing the string San
   
   grep ‘San’ databook

2. Print all lines where the person’s first name starts with J
   
   grep ‘^J’ databook

3. Print all lines ending in 700
   
   grep ‘700$’ databook

4. Print all lines that don’t contain 834
   
   grep –v ‘834’ databook

5. Print all lines where dob in December
   
   grep ‘:12\/' databook

6. All lines where phone is in the 408 area
   
   grep ‘:408-’ databook

7. Lines containing an uppercase letter, followed by four lowercase letters, a comma, a space and one uppercase letter
   
   grep ‘[:upper:][[:lower:]]\{4\}, [[:upper:]]’ databook
   grep ‘[A-Z][a-z]\{4\}, [A-Z]’ databook.txt

8. Print lines where the last name begins with k or K
   
   grep ‘^[ ] [k|K]/’ databook

9. Print lines preceded by a line number where the salary is a six-figure number
   
   grep –n ‘[0-9]\{6\}$’ databook

10. Print lines containing Lincoln or Lincoln
    
    grep ‘[L|l]incoln’ databook
Part Two

1. Change the name Jon to Jonathan
   ```bash
   sed 's/\<Jon\>/Jonathan/' databook.txt
   ```

2. Delete the first three lines
   ```bash
   sed '1,3d' databook.txt ⇔ sed -n '1,3p' databook.txt
   ```

3. Print lines 5 to 10
   ```bash
   sed -n '5,10p' databook.txt ⇔ sed '5,10!d' databook.txt
   ```

4. Delete lines containing Lane
   ```bash
   sed '/Lane/d' databook.txt ⇔ sed -n '/Lane/!p' databook.txt
   ```

5. Print all lines where the birthdays are in November or December.
   ```bash
   sed -n '/:11\/[0-9]/p; /:12\/[0-9]/p' databook.txt ⇔
   sed -n '/:1[12]\//p' databook.txt
   ```

6. Append three asterisks to the end of lines starting with Fred
   ```bash
   sed '/^Fred/s/$/***/' databook.txt ⇔
   sed '/^Fred.*$/&***/ databook.txt
   ```

7. Replace the line containing Jose with JOSE HAS RETIRED. (Do not apply this to address)
   ```bash
   sed '/^Jose /c JOSE HAS RETIRED' databook.txt
   ```

8. Change Popeye’s birthday to 11/14/46. Assume you don’t know Popeye’s original birthday. Use a
   regular expression to search for it.
   ```bash
   sed '/^Popeye/s/[1-9][0-9]*\/[1-9][0-9]*\/[0-9][0-9]/11\/14\/46/' databook.txt
   ```

9. Delete all blank lines
   ```bash
   sed '/^ */d' databook.txt
   ```

**Sed script**
```
1i PERSONNEL FILE
/500$/d
s/\(([^ ]\*)\)\(([^:]*):\)/2, \1:/
$a THE END
```