1. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000.

Sample table: employees----Create a employee table and insert few of records from below of it and write the queries for the all the questions below.

```
EMPLOYEE ID | FIRST NAME | LAST NAME | EMAIL | PHONE NUMBER
HIRE DATE | JOB ID | SALARY | COMMISSION PCT | MANAGER ID |
DEPARTMENT ID |
+-----
| 100 | Steven | King | SKING | 515.123.4567
1987-06-17 | AD_PRES | 24000.00 | 0.00 | 0 |
90 |
| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568
1987-06-18 | AD_VP | 17000.00 | 0.00 | 100 |
| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567
| 1987-06-20 | IT_PROG | 9000.00 | 0.00 | 102 |
60 |
60 | | 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT_PROG | 4800.00 | 0.00 | 103 |
60 |
| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569
1987-06-25 | FI_MGR | 12000.00 | 0.00 | 101 |
                    | Greenberg | NGREENBE | 515.124.4569
100 |
| 109 | Daniel | Faviet | DFAVIET | 515.124.4169
1987-06-26 | FI_ACCOUNT | 9000.00 | 0.00 | 108 |
100 |
| 110 | John | Chen | JCHEN | 515.124.4269
1987-06-27 | FI_ACCOUNT | 8200.00 | 0.00 | 108 |
100 I
       111 | Ismael | Sciarra | ISCIARRA | 515.124.4369
28 | FI ACCOUNT | 7700.00 | 0.00 | 108 |
1987-06-28 | FI ACCOUNT | 7700.00 |
100 |
| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469
1987-06-29 | FI_ACCOUNT | 7800.00 | 0.00 | 108 |
100 I
```

114 De 1987-07-01 PU_M2	en AN 1	Raphaely 11000.00	I	DRAPHEAL 0.00	515.127.456	1
115 A 1987-07-02 PU_C 30	lexander LERK	Khoo 3100.00	1	AKHOO 0.00	515.127.456	2
116 SI 1987-07-03 PU_C: 30	helli LERK	Baida 2900.00	1	SBAIDA 0.00	515.127.456 114	3
117 S: 1987-07-04 PU_C: 30	igal LERK	Tobias 2800.00	I	STOBIAS 0.00	515.127.456 114	4
118 G1 1987-07-05 PU_C	uy LERK	Himuro 2600.00	I	GHIMURO 0.00	515.127.456 114	5
30 119 Ka 1987-07-06 PU_C:	aren LERK	Colmenares 2500.00	I	KCOLMENA 0.00	515.127.456 114	6
30 120 Ma 1987-07-07 ST_M	atthew AN	Weiss 8000.00	I	MWEISS 0.00	650.123.123 100	4
50 121 Ao 1987-07-08 ST_M	dam AN	Fripp 8200.00	I	AFRIPP 0.00	650.123.223	4
50 122 Pa 1987-07-09 ST_M	ayam AN	Kaufling 7900.00	I	PKAUFLIN 0.00	650.123.323 100	4
50 123 S1 1987-07-10 ST_M	hanta AN	Vollman 6500.00	I	SVOLLMAN 0.00	650.123.423 100	4
50 124 Ke 1987-07-11 ST_M	evin AN	Mourgos 5800.00	I	KMOURGOS 0.00	650.123.523 100	4
50 125 Ji 1987-07-12 ST_C:	ulia LERK	Nayer 3200.00	I	JNAYER 0.00	650.124.121	4
50 126 I: 1987-07-13 ST_C:	rene LERK	Mikkilineni 2700.00	I	IMIKKILI 0.00	650.124.122 120	4
50 127 Ja 1987-07-14 ST_C	LERK	Landry 2400.00	I	JLANDRY 0.00	650.124.133 120	4
50 128 S ⁻ 1987-07-15 ST_C:	teven					
50 129 La 1987-07-16 ST_C	aura LERK	Bissot 3300.00	I	LBISSOT 0.00	650.124.523	4
50 130 Mo 1987-07-17 ST_C	ozhe LERK	Atkinson 2800.00	I	MATKINSO 0.00	650.124.623	4
50 	ames LERK	Marlow 2500.00	I	JAMRLOW 0.00	650.124.723 121	4
50 132 To 1987-07-19 ST_C	J LERK	Olson 2100.00	I	TJOLSON 0.00	650.124.823	4
50 133 Ja 1987-07-20 ST_C	ason LERK	Mallin 3300.00	I	JMALLIN	650.127.193	4

134 Michael 1987-07-21 ST_CLERK 50	2900.00		0.00	122	
135 Ki 1987-07-22 ST_CLERK	Gee 2400.00	1	KGEE 0.00	650.127.1734 122	
136 Hazel 1987-07-23 ST_CLERK 50	Philtanker 2200.00	I	HPHILTAN 0.00	650.127.1634 122	١
137 Renske 1987-07-24 ST_CLERK	3600.00		0.00	123	
138 Stephen 1987-07-25 ST_CLERK 50	Stiles 3200.00	1	SSTILES 0.00	650.121.2034 123	
139 John 1987-07-26 ST_CLERK	2700.00		0.00	123	
140 Joshua 1987-07-27 ST_CLERK 50	Patel 2500.00	1	JPATEL 0.00	650.121.1834 123	
141 Trenna 1987-07-28 ST_CLERK 50	Rajs 3500.00	1	TRAJS 0.00	650.121.8009 124	
142 Curtis 1987-07-29 ST_CLERK 50	Davies 3100.00	I	CDAVIES 0.00	650.121.2994 124	١
143 Randall 1987-07-30 ST_CLERK 50	Matos 2600.00	l	RMATOS 0.00	650.121.2874 124	
144 Peter 1987-07-31 ST_CLERK 50	Vargas 2500.00	1	PVARGAS 0.00	650.121.2004 124	
145 John 1987-08-01 SA_MAN 80	Russell 14000.00	1	JRUSSEL 0.40	011.44.1344.429268 100	
146 Karen 1987-08-02 SA_MAN 80	Partners 13500.00	1	KPARTNER 0.30	011.44.1344.467268 100	
147 Alberto 1987-08-03 SA_MAN 80	Errazuriz 12000.00	1	AERRAZUR 0.30	011.44.1344.429278 100	
148 Gerald 1987-08-04 SA_MAN 80	Cambrault 11000.00	1	GCAMBRAU 0.30	011.44.1344.619268 100	
149 Eleni 1987-08-05 SA_MAN 80	Zlotkey 10500.00	1	EZLOTKEY 0.20	011.44.1344.429018 100	
150 Peter 1987-08-06 SA_REP 80	Tucker 10000.00	1	PTUCKER 0.30	011.44.1344.129268 145	
151 David 1987-08-07 SA_REP 80	Bernstein 9500.00	1	DBERNSTE 0.25	011.44.1344.345268 145	
152 Peter 1987-08-08 SA_REP 80	Hall 9000.00	1	PHALL 0.25	011.44.1344.478968 145	
153 Christoph 1987-08-09 SA_REP 80	er Olsen 8000.00		COLSEN 0.20	011.44.1344.498718 145	I

```
| 154 | Nanette | Cambrault | NCAMBRAU | 011.44.1344.987668 | 1987-08-10 | SA_REP | 7500.00 | 0.20 | 145 |
80 |
        155 | Oliver
                         1987-08-11 | SA REP | 7000.00 |
                                           0.15 | 145 |
80 |
| 156 | Janette | King
1987-08-12 | SA_REP | 10000.00 |
                                       | JKING | 011.44.1345.429268 |
                                           0.35 |
                                                        146 I
80 |
| 157 | Patrick | Sully
1987-08-13 | SA_REP | 9500.00 |
                                       | PSULLY | 011.44.1345.929268 |
                                          0.35 | 146 |
80 I
| 158 | Allan | McEwen
1987-08-14 | SA_REP | 9000.00 |
                                       | AMCEWEN | 011.44.1345.829268 |
                         | McEwen
                                           0.35 |
                                                        146 |
80 I
| 159 | Lindsey | Smith
1987-08-15 | SA_REP | 8000.00 |
                                       | LSMITH | 011.44.1345.729268 |
                                        0.30 | 146 |
| 160 | Louise | Doran
1987-08-16 | SA_REP | 7500.00 |
                                       | LDORAN | 011.44.1345.629268 |
                         | Doran
                                            0.30 |
                                                     146 |
| 161 | Sarath | Sewall
1987-08-17 | SA_REP | 7000.00 |
                                       | SSEWALL | 011.44.1345.529268 |
                                          0.25 | 146 |
80 |
| 162 | Clara | Vishney
1987-08-18 | SA_REP | 10500.00 |
                                       | CVISHNEY | 011.44.1346.129268 |
                                           0.25 | 147 |
        163 | Danielle | Greene
                                       | DGREENE | 011.44.1346.229268 |
1987-08-19 | SA_REP | 9500.00 |
                                        0.15 | 147 |
80 |
        164 | Mattea
                                       | MMARVINS | 011.44.1346.329268 |
                         | Marvins
1987-08-20 | SA REP | 7200.00 |
                                        0.10 | 147 |
80 |
        165 | David
                         | Lee
                                       | DLEE | 011.44.1346.529268 |
1987-08-21 | SA_REP | 6800.00 |
                                          0.10 | 147 |
        166 | Sundar
                         | Ande
                                        | SANDE | 011.44.1346.629268 |
1987-08-22 | SA REP | 6400.00 |
                                        0.10 | 147 |
| 167 | Amit | Banda
1987-08-23 | SA_REP | 6200.00 |
                                        | ABANDA | 011.44.1346.729268 |
                                            0.10 |
                                                        147 |
| 168 | Lisa | Ozer
1987-08-24 | SA_REP | 11500.00 |
                                        0.25 | 148 |
                                        | HBLOOM | 011.44.1343.829268 |
        169 | Harrison | Bloom
1987-08-25 | SA REP | 10000.00 |
                                            0.20 |
                                                        148 I
        170 | Tayler
                         | Fox
                                       | TFOX | 011.44.1343.729268 |
1987-08-26 | SA_REP | 9600.00 |
                                        0.20 | 148 |
| 171 | William | Smith
1987-08-27 | SA_REP | 7400.00 |
                                       | WSMITH | 011.44.1343.629268 |
                                            0.15 |
                                                         148 I
| 172 | Elizabeth | Bates | EBATES | 011.44.1343.529268 | 1987-08-28 | SA_REP | 7300.00 | 0.15 | 148 |
| 173 | Sundita | Kumar | SKUMAR | 011.44.1343.329268 | 1987-08-29 | SA_REP | 6100.00 | 0.10 | 148 |
80 |
```

174	Ellen	Abel		EABEL	011.44.1644.429267	I
80						
175 1987-08-31 SA_ 80	Alyssa REP	Hutton 8800.00	ı	0.25	011.44.1644.429266	
176 1987-09-01 SA_	Jonathon REP	Taylor 8600.00		JTAYLOR 0.20	011.44.1644.429265 149	
80 177 1987-09-02 SA_ 80	Jack REP	Livingston 8400.00		JLIVINGS 0.20	011.44.1644.429264 149	I
178 1987-09-03 SA_ 0	Kimberely REP	Grant 7000.00		KGRANT 0.15	011.44.1644.429263 149	I
179 1987-09-04 SA					011.44.1644.429262 149	1
30 180 1987-09-05 SH_	Winston CLERK	Taylor 3200.00		WTAYLOR 0.00	650.507.9876 120	I
50 181 1987-09-06 SH_	Jean CLERK	Fleaur 3100.00		JFLEAUR 0.00	650.507.9877 120	I
50 182 1987-09-07 SH_	Martha CLERK	Sullivan 2500.00		MSULLIVA 0.00	650.507.9878 120	I
50 183 1987-09-08 SH_	Girard CLERK	Geoni 2800.00		GGEONI 0.00	650.507.9879 120	I
50 184 1987-09-09 SH_	Nandita CLERK	Sarchand 4200.00		NSARCHAN 0.00	650.509.1876 121	I
50 185 1987-09-10 SH_	Alexis CLERK	Bull 4100.00		ABULL 0.00	650.509.2876 121	I
50 186 1987-09-11 SH_	Julia CLERK	Dellinger 3400.00		JDELLING 0.00	650.509.3876 121	I
50 187 1987-09-12 SH_ 50	CLERK	Cabrio 3000.00		ACABRIO 0.00	650.509.4876 121	I
188 1987-09-13 SH_	Kelly	Chung 3800.00		KCHUNG 0.00	650.505.1876 122	1
50 189 1987-09-14 SH_	Jennifer CLERK	Dilly 3600.00		JDILLY 0.00	650.505.2876 122	I
50 190 1987-09-15 SH_				TGATES 0.00		I
50 191 1987-09-16 SH_						I
50 192 1987-09-17 SH_	Sarah CLERK	Bell 4000.00		SBELL 0.00	650.501.1876 123	I
50 193 1987-09-18 SH_ 50	Britney CLERK	Everett 3900.00		BEVERETT 0.00	650.501.2876 123	I

```
| 194 | Samuel | McCain | SMCCAIN | 650.501.3876 | 1987-09-19 | SH_CLERK | 3200.00 | 0.00 | 123 |
50 |
| 195 | Vance | Jones | VJONES | 650.501.4876
1987-09-20 | SH_CLERK | 2800.00 | 0.00 | 123 |
50 |
                    | Walsh
                                  | AWALSH | 650.507.9811
| 196 | Alana | Walsh
1987-09-21 | SH_CLERK | 3100.00 |
                                      0.00 |
                                                  124 |
50 |
198 | Donald | OConnell | DOCONNEL | 650.507.9833
1987-09-23 | SH CLERK | 2600.00 |
                                      0.00
                                               124 I
| 199 | Douglas | Grant | DGRANT | 650.507.9844
1987-09-24 | SH_CLERK | 2600.00 | 0.00 | 124 |
       200 | Jennifer | Whalen | JWHALEN | 515.123.4444
1987-09-25 | AD_ASST | 4400.00 |
                                      0.00 |
                                               101 |
       201 | Michael | Hartstein | MHARTSTE | 515.123.5555
1987-09-26 | MK_MAN | 13000.00 |
                                   0.00 | 100 |
20 I
| 202 | Pat | Fay
1987-09-27 | MK_REP | 6000.00 |
                                  | PFAY | 603.123.6666
                                     0.00 | 201 |
       203 | Susan | Mavris | SMAVRIS | 515.123.7777
1987-09-28 | HR REP | 6500.00 |
                                   0.00 | 101 |
40 I
| 204 | Hermann | Baer | HBAER | 515.123.8888
1987-09-29 | PR_REP | 10000.00 | 0.00 | 101 |
        205 | Shelley | Higgins | SHIGGINS | 515.123.8080
1987-09-30 | AC_MGR | 12000.00 |
                                     0.00 | 101 |
| 206 | William | Gietz | WGIETZ | 515.123.8181
1987-10-01 | AC_ACCOUNT | 8300.00 | 0.00 | 205 |
+----+
```

mysql> select first_name,last_name,salary from employees where salary not between 10000 and 15000;

Т			Т
first_name	e last_na	ame	salary
+	-+	+	+
Bruce	Ernst	6	8000
Steven	King	2	4000
Neena	Kochh	ar	17000

```
| Lex
          | De Haan
                       | 17000 |
| David
          | Austin
                      | 4800 |
| Valli
         | Pataballa | 4800 |
           | Lorentz
| Diana
                       | 4200 |
| Daniel
           | Faviet
                      | 9000 |
           | Chen
| John
                      | 8200 |
| Jose Manuel | Urman
                          | 7800 |
| Ismael
           | Sciarra
                     | 7700 |
| Alexander | Khoo
                        | 3100 |
| Luis
          | Popp
                     I 6900 I
| Alexander | Hunold
                       | 9000|
```

14 rows in set (0.00 sec)

2. Write a query to display the name (first_name, last_name) and department ID of all employees in departments 30 or 100 in ascending order.

Sample table: employees

mysql> select first_name,last_name,department_id from employees where department_id in(30, 100) order by department_id;

```
| first_name | last_name | department_id |
+----+---
Alexander | Khoo
                             30 I
          | Raphaely |
Den
                             30 |
Nancy
           | Greenberg |
                             100 |
Daniel
          | Faviet
                          100 |
John
                          100 |
          | Chen
Jose Manuel | Urman
                              100 |
Ismael
          | Sciarra |
                           100 l
Luis
         | Popp
                          100 |
```

3. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range \$10,000 through \$15,000 and are in department 30 or 100

Sample table: employees

mysql> select first_name,last_name,salary from employees where salary not between (10000 and 15000) and department_id in(30,100);

```
+----+
| first_name | last_name | salary |
+----+
        | Ernst | 6000 |
| Bruce
| Steven | King | 24000 |
| Neena
        | Kochhar | 17000 |
                 | 17000 |
| Lex
        | De Haan
| David
        | Austin | 4800 |
| Valli
        | Pataballa | 4800 |
         | Lorentz | 4200 |
| Diana
| Nancy | Greenberg | 12000 |
| Daniel
       | Faviet
                  9000 |
| John
         | Chen
                  | 8200 |
                    | 7800 |
| Jose Manuel | Urman
| Ismael
         | Sciarra
                 | 7700 |
| Alexander | Khoo
                    | 3100 |
| Luis
        | Popp
               | 6900 |
        | Raphaely | 11000 |
| Den
```

| Alexander | Hunold | 9000 |

+----+

16 rows in set (0.01 sec)

4. Write a query to display the name (first_name, last_name) and hire date for all employees who were hired in 1987

Sample table: employees

mysql> select first_name,last_name,hire_date from employees where year(hire_date) like 1987;

```
+----+
| first name | last name | hire date |
+----+
         | Ernst | 1987-06-21 |
| Bruce
| Steven | King | 1987-06-17 |
| Lex
        | De Haan | 1987-06-19 |
                | 1987-06-22 |
| David
       | Austin
| Valli
       | Pataballa | 1987-06-23 |
| Diana
        | Lorentz | 1987-06-24 |
| Nancy
        | Greenberg | 1987-06-25 |
        | Faviet
                | 1987-06-26 |
| Daniel
| John
        | Chen
                 | 1987-06-27 |
| Jose Manuel | Urman
                    | 1987-06-29 |
| Ismael
         | Sciarra | 1987-06-28 |
| Alexander | Khoo
                   | 1987-07-02 |
```

Luis	Popp	1987-06-30
Den	Raphaely	1987-07-01
Alexand	er Hunold	1987-06-20
+	+	++
16 rows in	set (0.01 sed	c)

5. Write a query to display the first_name of all employees who have both "b" and "c" in their first name.

Sample table: employees

mysql> select first_name from employees where first_name like '%b%' and first_name like '%c%';

+-----+
| first_name |
+-----+
| Bruce |
+-----+

1 row in set (0.01 sec)

6. Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to \$4,500, \$10,000, or \$15,000.

Sample table: employees

mysql> select last_name,job_id,salary from employees where job_id like 'lt_prog' or 'pu_clerk' and salary not in(4500,10000,15000);

```
+-----+
| last_name | job_id | salary |
+-----+
```

Ernst IT_PROG 6000
++
1 row in set, 1 warning (0.00 sec)
7. Write a query to display the last name of employees whose names have exactly 6 character
mysql> select last_name from employees where length(last_name)=6;
++
last_name
++
Faviet
Khoo
++
2 rows in set (0.00 sec)
8. Write a query to display the last name of employees having 'e' as the third character.
Sample table: employees
mysql> select last_name from employees where last_name like 'e%';
++
last_name
++
Greenberg
Chen
++
2 rows in set (0.00 sec)

9. Write a query to display the jobs/designations available in the employees table.

Sample table: employees

10. Write a query to display the name (first_name, last_name), salary and PF (15% of salary) of all employees.

Sample table: employees

mysql> select first_name,last_name,salary,(15*salary/100) as pf from employees;

```
+-----+
| first_name | last_name | salary | pf |
+-----+
| Bruce | Ernst | 6000 | 900 |
| Steven | King | 24000 | 3600 |
| Neena | Kochhar | 17000 | 2550 |
| Lex | De Haan | 17000 | 2550 |
| David | Austin | 4800 | 720 |
```

```
| Valli
         | Pataballa | 4800 | 720 |
| Diana
          | Lorentz | 4200 | 630 |
           | Greenberg | 12000 | 1800 |
| Nancy
| Daniel
          | Faviet
                    | 9000 | 1350 |
| John
          | Chen
                    | 8200 | 1230 |
| Jose Manuel | Urman
                        | 7800 | 1170 |
                     | 7700 | 1155 |
| Ismael
          | Sciarra
| Alexander | Khoo
                      | 3100 | 465 |
I Luis
         | Popp
                    | 6900 | 1035 |
          | Raphaely | 11000 | 1650 |
| Den
| Alexander | Hunold | 9000 | 1350 |
  -----+
16 rows in set (0.04 sec)
```

11. Write a query to select all record from employees where last name in 'BLAKE', 'SCOTT', 'KING' and 'FORD'.

Sample table: employees