

# Lab-11

## → PART-A :

1. Find employees whose name start with E.

→ `db.employee.find({ENAME : /^E/})`

2. Find employees whose name ends with n.

→ `db.employee.find({ENAME : /n$/})`

3. Find employees whose name starts with S or M in your collection.

→ `db.employee.find({ENAME : /^[SM]/})`

4. Find employees where city starts with A to M in your collection.

→ `db.employee.find({CITY : /^[A-M]/})`

5. Find employees where city name ends in 'ney'.

→ `db.employee.find({CITY : /ney/})`

6. Display employee info whose name contains n. (Both uppercase(N) and lowercase(n))

→ `db.employee.find({ENAME : /n/i})`

7. Display employee info whose name starts with E and having 5 characters.

→ `db.employee.find({ENAME : /^E.{4}$/})`

8. Display employee whose name start with S and ends in a.

→ `db.employee.find({ENAME : /^S.*a$/})`

9. Display EID, ENAME, CITY and SALARY whose name starts with 'Phi'.

➔ `db.employee.find({ENAME : /^Phi/}, {_id : 0, EID : 1, ENAME : 1, CITY : 1, SALARY : 1})`

10. Display ENAME, JOININGDATE and CITY whose city contains 'dne' as three letters in city name.

➔ `db.employee.find({CITY : /dne/}, {_id : 0, ENAME : 1, JOININGDATE : 1, CITY : 1})`

11. Display ENAME, JOININGDATE and CITY who does not belongs to city London or Sydney.

➔ `db.employee.find({CITY : /^(London|Sydney)$/i}, {_id : 0, ENAME : 1, JOININGDATE : 1, CITY : 1})`

12. Find employees whose names start with 'J'.

➔ `db.employee.find({ENAME : /^J/})`

13. Find employees whose names end with 'y'.

➔ `db.employee.find({ENAME : /y$/})`

14. Find employees whose names contain the letter 'a'.

➔ `db.employee.find({ENAME : /a/})`

15. Find employees whose names contain either 'a' or 'e'.

➔ `db.employee.find({ENAME : /[ae]/})`

16. Find employees whose names start with 'J' and end with 'n'.

➔ `db.employee.find({ENAME : /^J.*n$/})`

17. Find employees whose CITY starts with 'New'.

➔ `db.employee.find({CITY : /^New/})`

18. Find employees whose CITY does not start with 'L'

➔ `db.employee.find({CITY : {$not : /^L/ }})`

19. Find employees whose CITY contains the word 'York'.

➔ `db.employee.find({CITY : /York/})`

20. Find employees whose names have two consecutive vowels (a, e, i, o, u).

➔ `db.employee.find({ENAME : /[aeiou]{2}/})`

21. Find employees whose names have three or more letters.

➔ `db.employee.find({ENAME : /^.{3}/})`

22. Find employees whose names have exactly 4 letters.

➔ `db.employee.find({ENAME : /^.{4}$/})`

23. Find employees whose names start with either 'S' or 'M'.

➔ `db.employee.find({ENAME : /^[SM]/})`

24. Find employees whose names contain 'il' anywhere.

➔ `db.employee.find({ENAME : /il/})`

25. Find employees whose names do not contain 'a'.

➔ `db.employee.find({ENAME : {$not : /a/}})`

26. Find employees whose names contain any digit.

➔ `db.employee.find({ENAME : /\d/})`

27. Find employees whose names contain exactly one vowel.

➔ `db.employee.find({ENAME : /^[^aeiou]*[aeiou][^aeiou]*$/i})`

28. Find employees whose names start with any uppercase letter followed by any lowercase letter.

➔ `db.employee.find({ENAME : //})`

## → PART-B :

1. Display documents where sname start with K.

→ `db.Student.find({ENAME : /^K/})`

2. Display documents where sname starts with Z or D.

→ `db.Student.find({ENAME : /^[ZD]/})`

3. Display documents where city starts with A to R.

→ `db.Student.find({CITY : /^[A-R]/})`

4. Display students' info whose name start with P and ends with i.

→ `db.Student.find({ENAME : /^P.*i$/})`

5. Display students' info whose department name starts with 'C'.

→ `db.Student.find({DEPARTMENT : /^C/})`

6. Display name, sem, fees, and department whose city contains 'med' as three letters somewhere in city name.

→ `db.Student.find({CITY : /med/}, {_id : 0, SNAME : 1, SEM : 1, FEES : 1, DEPARTMENT : 1})`

7. Display name, sem, fees, and department who does not belongs to city Rajkot or Baroda.

→ `db.Student.find({CITY : {$not : /^(Rajkot|Baroda)$/i}}, {_id : 0, SNAME : 1, SEM : 1, FEES : 1, DEPARTMENT : 1})`

8. Find students whose names start with 'K' and are followed by any character.

→ `db.Student.find({ENAME : /^K/})`

9. Find students whose names end with 'a'.

→ `db.Student.find({ENAME : /a$/})`

10. Find students whose names contain 'ri'. (case-insensitive)

➔ `db.Student.find({ENAME : /ri/i})`

## ➔ PART-B :

1. Find students whose names start with a vowel (A, E, I, O, U).

➔ `db.Student.find({SNAME : {$regex : "^[AEIOU]"}})`

2. Find students whose CITY ends with 'pur' or 'bad'.

➔ `db.Student.find({CITY : {$regex : "^(pur|bad)"}, {$options : "i"}})`

3. Find students whose FEES starts with '1'.

4. Find students whose SNAME starts with 'K' or 'V'.

➔ `db.Student.find({SNAME : {$regex : "^[KV]"}})`

5. Find students whose CITY contains exactly five characters.

➔ `db.Student.find({CITY : {$regex : "^.{5}$"}})`

6. Find students whose names do not contain the letter 'e'.

➔ `db.Student.find({SNAME : {$not : {$regex : "e"}}})`

7. Find students whose CITY starts with 'Ra' and ends with 'ot'.

➔ `db.Student.find({CITY : {$regex : "^Ra.*ot$"}})`

8. Find students whose names contain exactly one vowel.

➔ `db.Student.find({SNAME : {$regex : "^[^aeiou]*[aeiou][^aeiou]*$", {$options : "i"}})`

9. Find students whose names start and end with the same letter.

➔ `db.Student.find({SNAME : {$regex : "^(.)*\\1$"}})`

10. Find students whose DEPARTMENT starts with either 'C' or 'E'.

➔ `db.Student.find({DEPARTMENT : {$regex : "^[CE]"}})`

11. Find students whose SNAME has exactly 5 characters.

➔ `db.Student.find({SNAME : {$regex : "^.5$"}})`

12. Find students whose GENDER is Female and CITY starts with 'A'.

➔ `db.Student.find({GENDER : "Female", CITY : {$regex : "/^A/"}})`