Group 1 Batch B

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DBMS questions

1. Select all records from the table ‘hospitals’.

> SELECT \* FROM hospitals;

2. Select all records from the table ‘doctors’.

> SELECT \* FROM doctors;

3. Select all records from the table ‘patients’.

> SELECT \* FROM patients;

4. Select all records from the table ‘blood\_bank’.

> SELECT \* FROM blood\_bank;

5. Select all records from the table ‘pharmacy\_products’.

> SELECT \* FROM pharmacy\_products;

6. Find the total number of hospitals in the database.

>SELECT COUNT(\*) FROM hospitals;

7. Find the total number of doctors in the database.

> SELECT COUNT(\*) FROM doctors;

8. Find the total number of patients in the database.

>SELECT COUNT(\*) FROM patients;

9. Find the total number of pharmacy products in the database.

>SELECT COUNT(\*) FROM pharmacy\_products;

10. Find the total number of blood banks in the database.

>SELECT COUNT(\*) FROM blood\_bank;

11. Find number of hospitals in each field of specialisation.

>SELECT Field\_of\_Spec, COUNT(\*) FROM hospitals

GROUP BY Field\_of\_Spec;

12. Select all Military hospitals from the table.

> SELECT \* FROM hospitals

WHERE Field\_of\_Spec like ‘MILITARY’;

13. Order hospitals in increasing order of capacity.

>SELECT \* FROM hospitals orderby Capacity DESC;

14. Find all hospitals where the capacity is greater than ‘n’.

>SELECT \* FROM hospitals

WHERE Capacity>n;

15. Find number of hospitals where the capacity is lesser than ‘n’.

>SELECT Count(\*) FROM hospitals

WHERE Capacity<n;

16. Find all hospitals between a given range of latitude(m to n) and longitude(a-b).

>SELECT \* FROM hospitals

WHERE (Latitude BETWEEN m AND n)

AND (Longitude BETWEEN a AND b);

17. Find the total capacity of all the hospitals in the database.

>SELECT Sum(\*) FROM hospitals

18. Insert new record to hospital database.

>INSERT INTO hospitals (Unique\_Id,Name, Address, Contact\_det, Field\_of\_Spec, Latitude, Longitude, Capacity)

Values(val1, val2, val3, val4, val5, val6, val7);

19. Update the capacity of a hospital having name as ‘str’ by ‘x’.

>UPDATE hospitals

SET Capacity = Capacity+x

WHERE Name like ‘str’;

20. Delete a particular record of a hospital.

>DELETE FROM hospitals

WHERE Unique\_Id = “str”

21. Find the number of doctors working at each hospital.

>SELECT hospitals.name, COUNT(\*) FROM hospitals, doctors

WHERE hospitals.Unique\_Id=doctors.Hospital\_Id

GROUP BY doctors.Hospital\_Id;

22. Arrange doctors in the decreasing order of their years of experience.

>SELECT \* FROM doctors

ORDER BY Years\_of\_Exp DESC;

23. Arrange doctors in the increasing order of their years of experience.

>SELECT \* FROM doctors

ORDER BY Years\_of\_Exp ASC;

24. Find all doctors who have more than ‘n’ years of experience.

>SELECT \* FROM doctors

WHERE Years\_of\_Exp>n;

25. Find all doctors who have less than ‘n’ years of experience.

>SELECT \* FROM doctors

WHERE Years\_of\_Exp<n;

26. Find number of doctors for each field of specialisation.

>SELECT Field\_of\_Spec, COUNT(\*) FROM doctors

GROUP BY Field\_of\_Spec;

27. Find the maximum number of doctors working in a particular field of specialisation.

>SELECT Field\_of\_Spec, Max(CNT) as M FROM (SELECT Field\_of\_Spec,COUNT(\*) as CNT FROM doctors GROUP BY Field\_of\_Spec) as P;

28. Find all doctors with highest experience.

>SELECT name ,Years\_of\_Exp FROM doctors

WHERE Years\_of\_Exp=(SELECT MAX(Years\_of\_Exp) FROM doctors);

29. Find all doctors with least experience.

>SELECT name ,Years\_of\_Exp FROM doctors

WHERE Years\_of\_Exp=(SELECT MIN(Years\_of\_Exp) FROM doctors);

30. Select all male patients.

>SELECT \* FROM patients

WHERE Gender=’M’;

31. Select all female patients.

>SELECT \* FROM patients

WHERE Gender=’F’;

32. Find number of patients assigned to each doctor.

>SELECT COUNT(patients.Name), doctors.Name FROM doctors, patients

WHERE patients.Doctor\_Id=doctors.Id

GROUP BY doctors.name;

33. Find number of patients having cancer.

>SELECT COUNT(\*) FROM patients

WHERE Illness like ’Cancer’;

34. Find number of patients suffering from each illness.

>SELECT Illness, COUNT(\*) FROM patients

GROUP BY Illness;

35. How many different blood groups are there?

>SELECT COUNT(DISTINCT(Blood\_Group))

FROM patients;

36. How many patients are there in each blood group?

>SELECT Blood\_Group, COUNT(\*) FROM patients

GROUP BY Blood\_Group;

37. Which is the most common blood group?

>SELECT Blood\_Group, MAX(cnt) AS mx FROM

(SELECT Blood\_Group, COUNT(\*) as cnt FROM patients

GROUP BY Blood\_Group) as p;

38. Which is the least common blood group?

>SELECT Blood\_Group, MIN(cnt) AS mn FROM

(SELECT Blood\_Group, COUNT(\*) as cnt FROM patients

GROUP BY Blood\_Group) as p;

39. Find the number of patients on each type of medication.

>SELECT Medication\_Drug, COUNT(\*) FROM patients

GROUP BY Medication\_Drug;

40. Which is the most common medicine given to patients?

>SELECT Medication\_Drug, MAX(cnt) AS max\_drug FROM

(SELECT Medication\_Drug, COUNT(\*) as cnt FROM patients

GROUP BY Medication\_Drug) as p;

41. How many patients are above the age of 50?

>SELECT COUNT(\*) FROM patients

WHERE Age>50;

42. What is the average age of the patients?

>SELECT AVG(Age) FROM patients;

43. How old is the oldest patient?

>SELECT MAX(Age) FROM patient;

44. Which is the most common illness?

>SELECT Illness, MAX(cnt) AS max\_illness FROM

(SELECT Illness, COUNT(\*) as cnt FROM patients

GROUP BY Illness) as p;

45. What is the oldest patient who has cancer?

>SELECT MAX(Age) FROM patients

WHERE Illness like ‘Cancer’;

46. What is the oldest patient who has cancer?

>SELECT MIN(Age) FROM patients

WHERE Illness like ‘Cancer’;

47. What is the average age of cancer patients?

>SELECT AVG(Age) FROM patients

WHERE Illness like ‘Cancer’;

48. Which doctor has the highest number of patients?

>CREATE VIEW v AS

(SELECT doctors.name AS doc\_name, COUNT(\*) AS cnt

FROM patients, doctors

WHERE doctors.Id=patients.Doctor\_Id);

SELECT doc\_name, MAX(cnt) FROM v;

49. What are the different medicines prescribed to cancer patients?

>SELECT DISTINCT(Medication\_Drug) FROM patients

WHERE Illness LIKE 'Cancer';

50. What is the average weight of the patients?

>SELECT AVG(Weight) FROM patients;

51. What is the maximum weight a person can have?

>SELECT MAX(Weight) FROM patients;

52. What is the maximum weight a person can have?

>SELECT MIN(Weight) FROM patients;

53. Who is the tallest patient?

>SELECT Name, MAX(Height) FROM patients;

54. Who is the shortest patient?

>SELECT Name, MIN(Height) FROM patients;

55. Show all patients whose name starts with ‘A’.

>SELECT (\*) FROM patients

WHERE Name like ‘A%’;

56. Which doctor has the least number of patients?

>CREATE VIEW v AS

(SELECT doctors.name AS doc\_name, COUNT(\*) AS cnt

FROM patients, doctors

WHERE doctors.Id=patients.Doctor\_Id);

SELECT doc\_name, MIN(cnt) FROM v;

57. How many people have donated blood to the blood bank?

>SELECT COUNT(DISTINCT(Donors)) FROM blood\_bank;

58. What is the average quantity of blood donated?

>SELECT AVG(Quantity) FROM blood\_bank;

59. What is the most common blood group donated?

>SELECT Blood\_Group, MAX(cnt) AS max\_bg FROM

(SELECT Blood\_Group, COUNT(\*) as cnt FROM blood\_bank

GROUP BY Blood\_Group) as p;

60. Who donated the most amount of blood?

>SELECT Donors, MAX(Quantity) FROM blood\_bank;

61. Who donated the least amount of blood?

>SELECT Donors,MIN(Quantity) FROM blood\_bank;

62. Who received the most amount of blood?  
 >SELECT Recipients, MAX(Quantity) FROM blood\_bank;

63. Who received the least amount of blood?  
 >SELECT Recipients,MIN(Quantity) FROM blood\_bank;

64. Arrange the amount of blood donated from highest to lowest.

>SELECT \* FROM blood\_bank

ORDER BY Quantity DESC;

65. How much blood of each type was donated?

>SELECT Blood\_Group, SUM(Quantity) FROM blood\_bank

GROUP BY Blood\_Group;

66. Which blood group received maximum donation?

>CREATE VIEW v AS

(SELECT Blood\_Group, SUM(Quantity) AS qnt FROM blood\_bank);

SELECT Blood\_Group, MAX(qnt) FROM v;

67. Which blood group received minimum donation?

>CREATE VIEW v AS

(SELECT Blood\_Group, SUM(Quantity) AS qnt FROM blood\_bank);

SELECT Blood\_Group, MIN(qnt) FROM v;

68. Which is the Northernmost hospital in the country?

>SELECT Name FROM hospitals

WHERE Latitude = (SELECT MAX(Latitude) FROM hospitals);

69. Which is the Southernmost hospital in the country?

>SELECT Name FROM hospitals

WHERE Latitude = (SELECT MIN(Latitude) FROM hospitals);

70. Which is the Easternmost hospital in the country?

>SELECT Name FROM hospitals

WHERE Longitude = (SELECT MIN(Longitude) FROM hospitals);

71. Which is the Westernmost hospital in the country?

>SELECT Name FROM hospitals

WHERE Latitude = (SELECT MAX(Longitude) FROM hospitals);

72. Which hospital has the maximum capacity?

>SELECT Name, MAX(Capacity) FROM hospitals;

73. Which hospital has the minimum capacity?

>SELECT Name, MIN(Capacity) FROM hospitals;

74. Increase the experience of all doctors whose experience is less than 10 years by one.

>UPDATE doctors

SET Years\_of\_Exp = Years\_of\_Exp + 1

WHERE Years\_of\_Exp<10;

75. What is the average experience of all the doctors?

>SELECT AVG(Years\_of\_Exp) FROM doctors;

76. How many total medicines are available?

>SELECT COUNT(\*) FROM pharmacy\_products

77. How many medicines have names starting with ‘A’?

>SELECT COUNT(\*) FROM pharmacy\_products

WHERE Name\_of\_Drug > “A” and Name\_of\_Drug < “B”;

78. How many medicines are expired? //assume expired date given… in dataset

79. How many medicines have cost above ‘x’?

>SELECT COUNT(\*) FROM pharmacy\_products

WHERE cost>x;

80. What’s the costliest medicine?

>SELECT Name\_of\_Drug, MAX(cost)

FROM pharmacy\_products;

81. What’s the cheapest medicine?

>SELECT Name\_of\_Drug, MIN(cost)

FROM pharmacy\_products;

82. What’s the average cost of medicines?

>SELECT AVG(cost) FROM pharmacy\_products;

83. Outbreaks in last year.

84. Which area was most affected by the outbreak

85. Which area was least affected by the outbreak

86. Outbreaks of last 10 years.

87. Which disease killed the most

88. Which disease killed the least

89. How many children were affected

90. How many newborns were affected

91. How many senior citizens were affected

92. What is the mean age which was affected the most

93. What is the mean age which was affected the least

94. How many women were affected

95. How many men were affected

96. How many babies were born

97. How many babies were male

98. How many babies were female

99. What is the male/female ratio

100. How many babies were born defective?