SQL EXERCISES

Prof. G.M. Nijseen

1. List the president's name and death age of presidents in sequence of president's name
2. List the party and president name of presidents, Present the results by party, and within party in alphabetical sequence of president name
3. List each death age once and in descending sequence
4. List each pair of president's age and spouse age from the marriage table once in descending sequence of president's age and within the same president's age sorted by asconding spouse age
5. List all facts available in the table PRESIDENTS about presidents Reagan R.
6. List all facts available in the table PRESIDENTS for all presidents except Reagan R. Present the results in alphabetical sequence of presidents' name
7. List all facts available in the table PRESIDENTS for presidents who died before 70 in descending death age
8. List all facts available in the table PRESIDENTS for presidents whose name is between Eisenhower and Nixon. Present in alphabetical sequence of president's name
9. List all facts available in the table PRESIDENTS for presidents who served 2 or 4 or 6 or 8 years in the White House and present in descending sequence of years served (two different formulations)
10. List all facts available in the table PRESIDENTS for republican presidents in sequence of president's name

11. Give the president's name, spouse name and their number of children in that marriage for those marriages which had than 5 children. Present the results in descending number of children

12. Give the president's name, spouse name and their ages at marriage for those marriages for those presidents who were in their twenties and the spouse a teenager.

13. Give the president's name, spouse name and the age at marriage for those marriages where both partners were the same age at the time of marriage. Present in sequence of spouse age

14. Select the average marriage age of married presidents ?

15. Select the average number of children of presidential marriages established before 1900 ?

16. Select the average number of wining votes in elections during the 20 th century.

17. How many elections have been held altogether ?

18. How many candidatures have there been in history which lost ?

19. How many states formed the Union ?

20. What is the average death age of republican presidents born after 1850 ?

21. How many presidential marriages were there altogether ?

22. How many presidents were still alive in 1985 ?

23. How many administrations ;have there been ?

24. How many presidents have there been ? (Use two different tables to get the answer.)

25. Which is the youngest spouse age ?

26. Which is the total number of children for marriages where the spouse was under 20 at time of marriage ?

$\frac{\Sigma P}{n} - \frac{\Sigma S}{n} = \frac{\Sigma (P-S)}{n}$

27. What is the average difference between the presidents's age and the spouse's age at the time of their marriage ?

28. In how many presidential marriages was the president at least two years older than the spouse ?

29. Print the average ratio of president age and spouse age at marriage, for all presidential marriages. $\frac{\Sigma(\frac{P}{S})}{n} =$

30. Find all marriage information about marriages where the president was less than 2 years older than the spouse. $P - S < 2$

31. Print the minimum, maximum and average ratio (in %) of years the president served in the White House and their age at death, considering only the dead presidents

32. Give the year and the total number of candidates for each election year, after 1900. Present the result in ascending year sequence.

33. Give for each election year after 1899 the election year and the number of candidates in sequence of election year.

34. Which presidents were at their last marriage twice as old as at their first marriages ?

35. Which elections after 1870 had more than 2 candidates

36. Give each married president and their average marriage age and the average marriage age of their spouses.

37. Give the average number of children per marriage.

38. Give each married president who married at least once before the age of 20 and his total number of children

39. For each president who married for the first time at an age of 35 or older, give their name and the total number of children of all his/her marriages.

40. Which presidents had no children in any of their marriages

41. Select those president's who married more than once and who had at least 2 children in each of their marriages.

42. Select the president's name and spouse name of those presidential marriages which resulted in more than 5 children

43. Write the following query without a GROUP BY clause :

```
SELECT      PARTY
FROM        PRESIDENT
GROUP BY PARTY
```

44. Which party had more than 7 presidents after 1850 ?

45. Which states were the birth state for more than one president born after 1880 ?

46. For each party, list the maximum death age and time party

47. Give the death age and the number of presidents for each death age

12 48. Select the party name, the oldest and the youngest president, for those parties of which the president with the maximum death age within the party is 20 % older than the president with the minimum death age within the party

49. For each state where a president was born, count the number of presidents, and list the average death age, the maximum years served and the minimum years served.

50. Which vice presidents served more than one president ? (And list the presidents served)

select vicepres, presname from adminprvp
where vicepres = ANY (select vicepres from adminvp group by vicepres having count(distinct presname)>1)

51. Give the administration number and the number of vice-presidents for those administrations which had more than one vice president having count(distinct vicepres_name)

52. Which administrations were headed by more than one president ?

53. Select the president's name and the year of inauguration of his first presidential administration.

select presname, min(YR_inau) from group by presnum

54. Count the number of presidents for each hobby, count the number of presidents.

55. Which presidents have served more than 6 years in the White House ?

56. For each year in which at least one state joined the U.S.A. give the year and total number of states entering that year.

57. How many states entered the U.S.A. in the year 1976.

58. Give the average number of hobbies per president

59. Which presidents had more than 2 children ?

60. Which presidential marriages resulted in more than 2 children ?

61. List the names, years served and total number of votes in all elections of presidents who participated in elections, who lost at least one of their elections and had served for more than 4 years

Select election, candidate, min(yrs_serv), sum(votes) from president, election where pres.pname = elec.candidate and yrs_serv > 4 group by candidate having count(distinct winner indic) > 1

62. For each president who participated in elections, list the average number of votes obtained in all elections, and the years served.

63. List the names, years served and total number of losing votes of presidents

64. Which president had the largest number of hobbies ? group by pres.name having count(*) >= ALL(select count(*))

65. What is the most frequently occurring year served ? 4

66. Give state names and years of entry of those states which entered the union in the same year. (If only one state entered in a given year, this does not satisfy the question) where year entered = any(select ye ... group ye having count(*)>1)

67. Give state names, administration number and year entered for those states that entered the Union during the same administration but in a different year.

68. For the party with the largest number of presidents born after 1850, list the party name and the number of presidents.

69. Give the name and years served of that president who served the longest ?

70. For each party which had presidents born after 1850 list party name and number of its presidents in party sequence

71. List those presidents who married at least twice and who have at least two children in any of their marriages

72. List the facts available in the table PRESIDENT for those presidents who were first inaugurated after the year of President Reagan's first marriage.

73. Who was the youngest president ? ปีสมปท - ปีเกิด น้อยสุด

74. List the name and the total number of children for presidents who married before the age of 40, who had more than one marriage, and who had a total of more than two children

75. List the total number of children for presidents who married more than once after the age of 50 to a spouse younger than 30.

76. For each winner and the entire group of losers of each election, give the election year, the votes of the winner and the sum of the losing votes.

77. Select the average marriage age of presidents at their first marriage ?

78. Compute the average marriage age of presidents at their second marriage.

79. Select the presidents name, birthyear and age at the second marriage

80. Select the presidents name, birthyear, and the year of their second presidential election victory.

81. List the name and birthyear of each president who won and lost an equal number of presidential elections.

82. Which president served in more administrations as president than had marriages ?

83. List the names of those presidents who have served a number of administrations equal to the total number of children of all their marriages.

84. Which candidate gained presidency in which election with the largest margin? ชนะ แพ้คนแรก
Show the next highest candidate their votes and the percentage of winner votes to total votes.

85. List the names of presidents who have been vice president

86. List the name of president who have not been vice president

87. List the names of the presidents who have never won, nor lost an Presidential election?

88. Select the president name of those presidents who had an age at their first marriage which is less than the average age of presidents at their first marriage.

89. Which presidents had more children in their first marriage than they had hobbies?

90. Which presidents were never married?

le yr, min(VOTES), SUM(VOTES)-