**PART 1 – CREATE TABLES and DATA**

1. Create tables with the below structure
   1. **PROGMR :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Columns** | **Null?** | **Type** | **Constraint** |
| NAME |  | VARCHAR(8) | Primary Key |
| DOB |  | DATE | Primary Key |
| DOJ |  | DATE | Primary Key |
| SEX |  | VARCHAR(1) |  |
| PROF1 |  | VARCHAR(8) |  |
| PROF2 | Y | VARCHAR(8) |  |
| SAL |  | DECIMAL(4,0) | SAL > 0 or SAL is null |

* 1. **SOFTWARE :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Null?** | **Type** | **Constraint** |
| NAME |  | VARCHAR(8) | Primary Key |
| TITLE |  | VARCHAR(20) | Primary Key |
| DEV\_IN |  | VARCHAR(8) |  |
| SCOST | Y | DECIMAL(5,0) | Cost > 0 if Sold > 0 |
| DCOST | Y | DECIMAL(5,0) |  |
| SOLD | Y | INTEGER |  |

* 1. **STUDIES :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Null?** | **Type** | **Constraint** |
| NAME |  | VARCHAR(8) | Primary Key |
| SPLACE |  | VARCHAR(9) |  |
| COURSE |  | VARCHAR(5) | Primary Key |
| CCOST |  | NUMBER(5) | CCOST > 0 |

1. Insert below data into the tables.
   1. **PROGMR :**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **NAME** | **DOB** | **DOJ** | **S** | **PROF1** | **PROF2** | **SAL** |
| ANAND | 30-APR-66 | 21-APR-92 | M | PASCAL | BASIC | 3200 |
| ALTAF | 02-JUL-64 | 13-NOV-90 | M | CLIPPER | COBOL | 2800 |
| JAGADESH | 06-OCT-70 | 04-OCT-94 | M | ORACLE | JAVA | 4100 |
| JULIANA | 31-JAN-68 | 21-APR-90 | F | COBOL | DBASE | 3000 |
| KAMALA | 30-OCT-68 | 02-JAN-92 | F | C | DBASE | 2900 |
| MARY | 24-JUN-70 | 01-FEB-91 | F | C++ | ORACLE | 4500 |
| NELSON | 11-SEP-65 | 11-OCT-89 | M | COBOL | DBASE | 2500 |
| PATRICK | 19-NOV-65 | 11-OCT-89 | M | PASCAL | CLIPPER | 2800 |
| QADIR | 31-AUG-65 | 21-APR-93 | M | ASSEMBLY | C | 3000 |
| RAMESH | 03-MAY-67 | 28-FEB-91 | M | PASCAL | DBASE | 3200 |
| REBECCA | 01-JAN-67 | 01-DEC-90 | F | BASIC | COBOL | 2500 |
| REMITHA | 26-APR-70 | 20-APR-93 | F | C | ASSEMBLY | 3600 |
| REVATHI | 02-DEC-69 | 02-JAN-92 | F | PASCAL | BASIC | 3700 |
| VIJAYA | 14-DEC-65 | 02-MAY-92 | F | FOXPRO | C | 3500 |

* 1. **SOFTWARE :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NAME** | **TITLE** | **DEV\_IN** | **SCOST** | **DCOST** | **SOLD** |
| ANAND | PARACHUTES | BASIC | 400 | 6000 | 43 |
| ANAND | VIDEO TITLING PACK | PASCAL | 7500 | 16000 | 9 |
| JAGADESH | SERIAL LINK UTILITY | JAVA | 800 | 7500 | 10 |
| JAGADESH | SHARES MANAGEMENT | ORACLE | 3000 | 12000 | 14 |
| JULIANA | INVENTORY CONTROL | COBOL | 3000 | 3500 | 0 |
| KAMALA | PAYROLL PACKAGE | DBASE | 9000 | 20000 | 7 |
| MARY | FINANCILA ACC S/W | ORACLE | 18000 | 85000 | 4 |
| MARY | CODE GENERATOR | C | 4500 | 20000 | 23 |
| MARY | READ ME | C++ | 300 | 1200 | 84 |
| PATRICK | GRAPHIC EDITOR | PASCAL | 750 | 5000 | 11 |
| QADIR | BOMBS AWAY | ASSEMBLY | 500 | 530 | 114 |
| QADIR | VACCINES | C | 1900 | 3400 | 21 |
| RAMESH | HOTEL MANAGEMENT | DBASE | 12000 | 35000 | 4 |
| RAMESH | DEAD LEE | PASCAL | 100 | 4500 | 73 |
| **NAME** | **TITLE** | **DEV\_IN** | **SCOST** | **DCOST** | **SOLD** |
| REMITHA | PC UTILITIES | C | 725 | 5000 | 51 |
| REMITHA | TSR HELP PACKAGE | ASSEMBLY | 2500 | 6000 | 6 |
| REVATHI | HOTEL MANAGEMENT | PASCAL | 1100 | 75000 | 2 |
| REVATHI | QUIZ MASTER | BASIC | 3200 | 2100 | 15 |
| VIJAYA | ISK EDITOR | C | 900 | 700 | 6 |

* 1. **STUDIES :**

| **NAME** | **SPLACE** | **COURS** | **CCOST** |
| --- | --- | --- | --- |
| ANAND | SABHARI | PGDCA | 4500 |
| ALTAF | CCIT | DCA | 7200 |
| JAGADESH | S.S.I.L | DCA | 3500 |
| JULIANA | BITS | DCA | 22000 |
| KAMALA | PRAGATHI | DCP | 5000 |
| MARY | SABHARI | DCP | 5000 |
| NELSON | PRAGATHI | DAP | 6200 |
| QADIR | APPLE | HDCP | 14000 |
| RAMESH | SABHARI | PGDCA | 4500 |
| REBECCA | BRILLIANT | DCA | 11000 |
| REMITHA | BDPS | DCS | 6000 |
| REVATHI | SABHARI | DAP | 5000 |
| VIJAYA | BDPS | DCA | 48000 |
| PATRICK | PRAGATHI | DCAP | 5200 |

**PART 2 – SQL Queries**

1. Find out the selling cost average for packages developed in PASCAL
2. Display the NAMES & AGES of all the programmers
3. Display the NAMES of those who have done the DAP course
4. What is the HIGHEST number of copies sold by a package
5. Display the NAMES & DOB of all the Programmers born in JANUARY
6. Display the LOWEST course fee
7. How many Programmers have done the PGDCA course.
8. How much revenue has been earned through the sale of packages in C
9. Display the details of the software developed by Ramesh
10. How many Programmers studied at SABHARI
11. Display the packages whose sales crossed the 20000 mark
12. Find out the NUMBER OF COPIES which should be sold to recover the DEVELOPMENT COST of each package.
13. Display the details of the packages for which development cost has been recovered
14. What is the price of the COSTLIEST software developed in BASIC
15. How many packages were developed in DBASE
16. How many programmers studied at PRAGATHI
17. How many programmers paid 5000 to 10000 for their COURSE
18. What is the average COURSE fee.
19. Display the details of the programmers knowing C
20. How many programmers know either COBOL or PASCAL.
21. How many programmers don’t know PASCAL & C
22. How old is the OLDEST male programmer.
23. What is the average age of female Programmers
24. Calculate the experience in years for each programmer and display along with the names in DESCENDING order.
25. Who are the Programmers who celebrate their birthday during this month
26. How many female programmer are there
27. What are the languages known by male programmers.
28. What is the average salary
29. How many people draw 2000 to 4000
30. Display the details of those who don’t know CLIPPER,COBOL or PASCAL.
31. How many female programmers knowing C are above 24 years of age.
32. Who are the programmers who will be celebrating their birthdays within a week
33. Display the details of those with less than a year’s experience.
34. Display the details of those who will complete 2 years of service this year.
35. Calculate the amount to be recovered for those packages whose development cost has not been yet recovered
36. List the packages which has not been sold so far.
37. Find out the cost of the software developed by MARY.
38. Display the institute names from the STUDIES table without duplicates.
39. How many different courses are mentioned in the studies table
40. Display the names of the programmers whose names contain 2 occurrence of the letter ‘A’
41. Display the names of the programmers whose names contain up to 5 characters
42. How many female programmers knowing COBOL have more than 2 years’ experience.
43. What is the length of the shortest name in the programmer table.
44. What is the average development cost of a package developed in COBOL
45. Display the name, sex , DOB (DD/MON/YY FORMAT) for a programmer without using the programmers without using conversion function.
46. What is the amount paid in salaries of the male programmers who do not know COBOL
47. Who are the programmers who were born on the last day of the month
48. Display the SCOST, DCOST & difference between SCOST and DCOST in descending order of difference
49. Display the names of the packages whose names contain more than 1 word.
50. Display the name, DOB, DOJ of those month of birth and month of joining are the same.
51. Display the number of packages developed in each language.
52. Display the number of packages developed by each person.