1. **Select One Hour Salary of All employees**

select ename, sal,sal/720 as "one hour salary" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **one hour salary** |
| SMITH | 800 | 1.11111111111111111111111111111111111111 |
| ALLEN | 1600 | 2.22222222222222222222222222222222222222 |
| WARD | 1250 | 1.73611111111111111111111111111111111111 |
| JONES | 2975 | 4.13194444444444444444444444444444444444 |
| MARTIN | 1250 | 1.73611111111111111111111111111111111111 |
| BLAKE | 2850 | 3.95833333333333333333333333333333333333 |
| CLARK | 2450 | 3.40277777777777777777777777777777777778 |
| SCOTT | 3000 | 4.16666666666666666666666666666666666667 |
| KING | 5000 | 6.94444444444444444444444444444444444444 |
| TURNER | 1500 | 2.08333333333333333333333333333333333333 |
| ADAMS | 1100 | 1.52777777777777777777777777777777777778 |
| JAMES | 950 | 1.31944444444444444444444444444444444444 |
| FORD | 3000 | 4.16666666666666666666666666666666666667 |

1. **Show the output using Concatenation Function Like “ Clark is Analyst”.**

select concat(concat(ename, ' is a ' ), job) from emp

|  |
| --- |
| **CONCAT(CONCAT(ENAME,'ISA'),JOB)** |
| SMITH is a CLERK |
| ALLEN is a SALESMAN |
| WARD is a SALESMAN |
| JONES is a MANAGER |
| MARTIN is a SALESMAN |
| BLAKE is a MANAGER |
| CLARK is a MANAGER |
| SCOTT is a ANALYST |
| KING is a PRESIDENT |
| TURNER is a SALESMAN |
| ADAMS is a CLERK |
| JAMES is a CLERK |
| FORD is a ANALYST |

1. **Add 5 months in HireDate.**

select ename,hiredate,add\_months(hiredate,5) as output from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **HIREDATE** | **OUTPUT** |
| SMITH | 12/17/1980 | 05/17/1981 |
| ALLEN | 02/20/1981 | 07/20/1981 |
| WARD | 02/22/1981 | 07/22/1981 |
| JONES | 04/02/1981 | 09/02/1981 |
| MARTIN | 09/28/1981 | 02/28/1982 |
| BLAKE | 05/01/1981 | 10/01/1981 |
| CLARK | 06/09/1981 | 11/09/1981 |
| SCOTT | 12/09/1982 | 05/09/1983 |
| KING | 11/17/1981 | 04/17/1982 |
| TURNER | 09/08/1981 | 02/08/1982 |
| ADAMS | 01/12/1983 | 06/12/1983 |
| JAMES | 12/03/1981 | 05/03/1982 |
| FORD | 12/03/1981 | 05/03/1982 |

1. **Floor the One Hour Salary of each employee.**

select ename, sal,floor(sal/720) as "floor of one hour salary" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **floor of one hour salary** |
| SMITH | 800 | 1 |
| ALLEN | 1600 | 2 |
| WARD | 1250 | 1 |
| JONES | 2975 | 4 |
| MARTIN | 1250 | 1 |
| BLAKE | 2850 | 3 |
| CLARK | 2450 | 3 |
| SCOTT | 3000 | 4 |
| KING | 5000 | 6 |
| TURNER | 1500 | 2 |
| ADAMS | 1100 | 1 |
| JAMES | 950 | 1 |
| FORD | 3000 | 4 |

1. **Calculate the Total Days from the HireDate to now.**

select ename, hiredate,sysdate-hiredate as "total days" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **HIREDATE** | **total days** |
| SMITH | 12/17/1980 | 14540.4328587962962962962962962962962963 |
| ALLEN | 02/20/1981 | 14475.4328587962962962962962962962962963 |
| WARD | 02/22/1981 | 14473.4328587962962962962962962962962963 |
| JONES | 04/02/1981 | 14434.4328587962962962962962962962962963 |
| MARTIN | 09/28/1981 | 14255.4328587962962962962962962962962963 |
| BLAKE | 05/01/1981 | 14405.4328587962962962962962962962962963 |
| CLARK | 06/09/1981 | 14366.4328587962962962962962962962962963 |
| SCOTT | 12/09/1982 | 13818.4328587962962962962962962962962963 |
| KING | 11/17/1981 | 14205.4328587962962962962962962962962963 |
| TURNER | 09/08/1981 | 14275.4328587962962962962962962962962963 |
| ADAMS | 01/12/1983 | 13784.4328587962962962962962962962962963 |
| JAMES | 12/03/1981 | 14189.4328587962962962962962962962962963 |
| FORD | 12/03/1981 | 14189.4328587962962962962962962962962963 |

1. **Show the Next Monday from Each Employee’s HireDate.**

select ename, hiredate,next\_day(hiredate,'MONDAY') as "next monday" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **HIREDATE** | **next monday** |
| SMITH | 12/17/1980 | 12/22/1980 |
| ALLEN | 02/20/1981 | 02/23/1981 |
| WARD | 02/22/1981 | 02/23/1981 |
| JONES | 04/02/1981 | 04/06/1981 |
| MARTIN | 09/28/1981 | 10/05/1981 |
| BLAKE | 05/01/1981 | 05/04/1981 |
| CLARK | 06/09/1981 | 06/15/1981 |
| SCOTT | 12/09/1982 | 12/13/1982 |
| KING | 11/17/1981 | 11/23/1981 |
| TURNER | 09/08/1981 | 09/14/1981 |
| ADAMS | 01/12/1983 | 01/17/1983 |
| JAMES | 12/03/1981 | 12/07/1981 |
| FORD | 12/03/1981 | 12/07/1981 |

1. **Your output show the One Year Salary with power of 3.**

select ename, sal,power(sal\*12,3) as "(sal\*12)^3" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **(sal\*12)^3** |
| SMITH | 800 | 884736000000 |
| ALLEN | 1600 | 7077888000000 |
| WARD | 1250 | 3375000000000 |
| JONES | 2975 | 45499293000000 |
| MARTIN | 1250 | 3375000000000 |
| BLAKE | 2850 | 40001688000000 |
| CLARK | 2450 | 25412184000000 |
| SCOTT | 3000 | 46656000000000 |
| KING | 5000 | 216000000000000 |
| TURNER | 1500 | 5832000000000 |
| ADAMS | 1100 | 2299968000000 |
| JAMES | 950 | 1481544000000 |
| FORD | 3000 | 46656000000000 |

1. **Find Square Root of length of Employee Names.**

select ename,length(ename) as "length", sqrt(length(ename)) as "Square root of Length"from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **length** | **Square root of Length** |
| SMITH | 5 | 2.23606797749978969640917366873127623544 |
| ALLEN | 5 | 2.23606797749978969640917366873127623544 |
| WARD | 4 | 2 |
| JONES | 5 | 2.23606797749978969640917366873127623544 |
| MARTIN | 6 | 2.44948974278317809819728407470589139197 |
| BLAKE | 5 | 2.23606797749978969640917366873127623544 |
| CLARK | 5 | 2.23606797749978969640917366873127623544 |
| SCOTT | 5 | 2.23606797749978969640917366873127623544 |
| KING | 4 | 2 |
| TURNER | 6 | 2.44948974278317809819728407470589139197 |
| ADAMS | 5 | 2.23606797749978969640917366873127623544 |
| JAMES | 5 | 2.23606797749978969640917366873127623544 |
| FORD | 4 | 2 |

1. **Get Last Two letters of ename using Substr Function.**

select ename, substr(ename,-2) as "last 2 letter of ename" from emp

|  |  |
| --- | --- |
| **ENAME** | **last 2 letter of ename** |
| SMITH | TH |
| ALLEN | EN |
| WARD | RD |
| JONES | ES |
| MARTIN | IN |
| BLAKE | KE |
| CLARK | RK |
| SCOTT | TT |
| KING | NG |
| TURNER | ER |
| ADAMS | MS |
| JAMES | ES |
| FORD | RD |

1. **Show The Names in format like “Martin”.**

select ename, initcap(ename) as "output" from emp

|  |  |
| --- | --- |
| **ENAME** | **output** |
| SMITH | Smith |
| ALLEN | Allen |
| WARD | Ward |
| JONES | Jones |
| MARTIN | Martin |
| BLAKE | Blake |
| CLARK | Clark |
| SCOTT | Scott |
| KING | King |
| TURNER | Turner |
| ADAMS | Adams |
| JAMES | James |
| FORD | Ford |

1. **Show Salary with Dollor Sign($) like 1600$.**

select ename, sal,concat(TO\_CHAR (sal, '99999'),'$') as output from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **OUTPUT** |
| SMITH | 800 | 800$ |
| ALLEN | 1600 | 1600$ |
| WARD | 1250 | 1250$ |
| JONES | 2975 | 2975$ |
| MARTIN | 1250 | 1250$ |
| BLAKE | 2850 | 2850$ |
| CLARK | 2450 | 2450$ |
| SCOTT | 3000 | 3000$ |
| KING | 5000 | 5000$ |
| TURNER | 1500 | 1500$ |
| ADAMS | 1100 | 1100$ |
| JAMES | 950 | 950$ |
| FORD | 3000 | 3000$ |

1. Show the **Number of A’s** in each employee name.

select ename,length(ename)- length(replace(ename,'A',null)) as "NO. of A"from emp

|  |  |
| --- | --- |
| **ENAME** | **NO. of A** |
| SMITH | 0 |
| ALLEN | 1 |
| WARD | 1 |
| JONES | 0 |
| MARTIN | 1 |
| BLAKE | 1 |
| CLARK | 1 |
| SCOTT | 0 |
| KING | 0 |
| TURNER | 0 |
| ADAMS | 2 |
| JAMES | 1 |
| FORD | 0 |

1. What is Difference Between **Trunc and Round** Function

Round function used to round the number to specified decimal places while trunc used to delete the number to specified decimal places.

1. Show the **Total Number of Days**, Smith has Worked.

select ename, hiredate,sysdate-hiredate as "total days" from emp

where ename='SMITH'

|  |  |  |
| --- | --- | --- |
| **ENAME** | **HIREDATE** | **total days** |
| SMITH | 12/17/1980 | 14540.4375810185185185185185185185185185 |

1. Show the HireDate as “Monday September 1981”.

SELECT ename,hiredate,TO\_CHAR (hiredate, 'Day Month YYYY') as "output" from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **HIREDATE** | **output** |
| SMITH | 12/17/1980 | Wednesday December 1980 |
| ALLEN | 02/20/1981 | Friday February 1981 |
| WARD | 02/22/1981 | Sunday February 1981 |
| JONES | 04/02/1981 | Thursday April 1981 |
| MARTIN | 09/28/1981 | Monday September 1981 |
| BLAKE | 05/01/1981 | Friday May 1981 |
| CLARK | 06/09/1981 | Tuesday June 1981 |
| SCOTT | 12/09/1982 | Thursday December 1982 |
| KING | 11/17/1981 | Tuesday November 1981 |
| TURNER | 09/08/1981 | Tuesday September 1981 |
| ADAMS | 01/12/1983 | Wednesday January 1983 |
| JAMES | 12/03/1981 | Thursday December 1981 |
| FORD | 12/03/1981 | Thursday December 1981 |

1. **Using Decode increase the salary of employees like 10%**

**increase in the employees of Dept. 30, 15% to Dept. 20 and**

**17% to Dept. 10.**

**Solution:**

SELECT ename,sal,deptno,

decode(deptno , 30,sal+ (sal\*10)/100,

20,sal+ (sal\*15)/100,

30,sal+ (sal\*17)/100,

sal )

as "revised salary"

from emp

|  |  |  |  |
| --- | --- | --- | --- |
| **ENAME** | **SAL** | **DEPTNO** | **revised salary** |
| SMITH | 800 | 20 | 920 |
| ALLEN | 1600 | 30 | 1760 |
| WARD | 1250 | 30 | 1375 |
| JONES | 2975 | 20 | 3421.25 |
| MARTIN | 1250 | 30 | 1375 |
| BLAKE | 2850 | 30 | 3135 |
| CLARK | 2450 | 10 | 2450 |
| SCOTT | 3000 | 20 | 3450 |
| KING | 5000 | 10 | 5000 |
| TURNER | 1500 | 30 | 1650 |
| ADAMS | 1100 | 20 | 1265 |
| JAMES | 950 | 30 | 1045 |
| FORD | 3000 | 20 | 3450 |

1. **Show the remainder of all employees when divided by 6500.**

Select ename, sal ,mod(sal,6500) from emp

|  |  |  |
| --- | --- | --- |
| **ENAME** | **SAL** | **MOD(SAL,6500)** |
| SMITH | 800 | 800 |
| ALLEN | 1600 | 1600 |
| WARD | 1250 | 1250 |
| JONES | 2975 | 2975 |
| MARTIN | 1250 | 1250 |
| BLAKE | 2850 | 2850 |
| CLARK | 2450 | 2450 |
| SCOTT | 3000 | 3000 |
| KING | 5000 | 5000 |
| TURNER | 1500 | 1500 |
| ADAMS | 1100 | 1100 |
| JAMES | 950 | 950 |
| FORD | 3000 | 3000 |

1. **Show the ename and Salary of those employees who**

**Were not hired in 1981.**

Select ename, hiredate from emp

where to\_char(hiredate,'yyyy') NOT like '1981'

|  |  |
| --- | --- |
| **ENAME** | **HIREDATE** |
| SMITH | 12/17/1980 |
| SCOTT | 12/09/1982 |
| ADAMS | 01/12/1983 |

1. **Display the Month Only from Hiredate.**

Select ename, to\_char(hiredate,'MONTH') as "hiredate Month only"from emp

|  |  |
| --- | --- |
| **ENAME** | **hiredate Month only** |
| SMITH | DECEMBER |
| ALLEN | FEBRUARY |
| WARD | FEBRUARY |
| JONES | APRIL |
| MARTIN | SEPTEMBER |
| BLAKE | MAY |
| CLARK | JUNE |
| SCOTT | DECEMBER |
| KING | NOVEMBER |
| TURNER | SEPTEMBER |
| ADAMS | JANUARY |
| JAMES | DECEMBER |
| FORD | DECEMBER |

1. **By using NVL2 function Show the Total Salary ( Net Salary )**

**including actual salary and commission.**

Select ename,sal,comm, nvl2(comm,sal+comm,sal) as "Net Salary"from emp

|  |  |  |  |
| --- | --- | --- | --- |
| **ENAME** | **SAL** | **COMM** | **Net Salary** |
| SMITH | 800 | - | 800 |
| ALLEN | 1600 | 300 | 1900 |
| WARD | 1250 | 500 | 1750 |
| JONES | 2975 | - | 2975 |
| MARTIN | 1250 | 1400 | 2650 |
| BLAKE | 2850 | - | 2850 |
| CLARK | 2450 | - | 2450 |
| SCOTT | 3000 | - | 3000 |
| KING | 5000 | - | 5000 |
| TURNER | 1500 | 0 | 1500 |
| ADAMS | 1100 | - | 1100 |
| JAMES | 950 | - | 950 |
| FORD | 3000 | - | 3000 |