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

2. **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

3. **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

4. **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

5. **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	14540.432858796296296296296296296963
ALLEN	02/20/1981	14475.432858796296296296296296296963
WARD	02/22/1981	14473.432858796296296296296296296963
JONES	04/02/1981	14434.432858796296296296296296296963
MARTIN	09/28/1981	14255.432858796296296296296296296963
BLAKE	05/01/1981	14405.432858796296296296296296296963
CLARK	06/09/1981	14366.432858796296296296296296296963
SCOTT	12/09/1982	13818.432858796296296296296296296963
KING	11/17/1981	14205.432858796296296296296296296963
TURNER	09/08/1981	14275.432858796296296296296296296963
ADAMS	01/12/1983	13784.432858796296296296296296296963
JAMES	12/03/1981	14189.432858796296296296296296296963
FORD	12/03/1981	14189.432858796296296296296296296963

6. **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

7. **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

8. **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	2.236067977499789696409173668731276235 44
ALLEN	5	2.236067977499789696409173668731276235 44
WARD	4	2
JONES	5	2.236067977499789696409173668731276235 44
MARTIN	6	2.449489742783178098197284074705891391 97
BLAKE	5	2.236067977499789696409173668731276235 44
CLARK	5	2.236067977499789696409173668731276235 44

SCOTT	5	2.236067977499789696409173668731276235 44
KING	4	2
TURNER	6	2.449489742783178098197284074705891391 97
ADAMS	5	2.236067977499789696409173668731276235 44
JAMES	5	2.236067977499789696409173668731276235 44
FORD	4	2

9. **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

10. 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

11. 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$

12. 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

13. 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.

14. 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	14540.437581018518518518518518518518518

15. 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

16. 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

17. 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

18. 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

19. 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

20. 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