1. Write a PL/SQL block which includes a procedure getCleanerDetails which accepts a cleaner number and returns the cleaners name and salary. The main block should call the procedure with cleaner number ‘113’ and output this cleaner’s details including the salary which has been increased by 10%.

**(Cleaner table contains following fields: CleanerId, CleanerName, Salary, Status)**

1. Create stored function is called getCleanersLocation. This function takes as input a cleaner’s number and returns the cleaner’s depot address. Call the function from within an SQL statement to select the cleaner’s name and location for a particular cleaner.
2. 

Write a PL/SQL code to retrieve the employee name, join\_date, and

designation from employee database of an employee whose number is

input by the user.

1. Write a PL/SQL code to calculate tax for an employee of an organization –XYZ and to display his/her name & tax, by creating table under employee database as below.



1. Write a PL/SQL code to calculate the total and percentage of marks of the students in four subjects from the table given below:

STUDENT (RNO, S1, S2, S3, S4, total, Percentage)

1. Write PL/SQL Code to display employee number, name and basic of 5 highest paid employees.
2. Write PL/SQL code to calculate the total salary of first n records of employee table. The n value should be passed to cursor as a parameter.
3. Write PL/SQL code update the salary of employees who earn less than average salary of a concerned department.
4. Write a row trigger to insert existing values of the salary table into a new table when employee salary is updated.
5. Write a trigger on the employee table which shows the old values and new values of ename after any updations on ename done in employee table.
6. Write a PL/SQL function that accepts department number and returns the total salary of that department.
7. Write a PL/SQL code to create a) Package body b) Package specification to insert, delete and update the records on a student table.

(Note Student table contains following fields

Student\_no, Student\_name, email, phone, course, semester)

1. Write a Program to find whether a number is palindrome or not.
2. Write a program to print the table of a given number.
3. Write a program to print Fibonacci series.
4. Write a program to reverse a string.
5. Write a program to find greatest of three numbers.
6. Write a program to display prime numbers from 1 to 50.
7. Write a program to print whether a given number is Armstrong number or not.
8. Write a program in PL/SQL to display class of students based on marks obtained.
9. Create a table called circle having columns radius and area. Insert 5 records of values of both radius and area using for loop (hint : area = pi \* pow (radius,2), pi=3.14).
10. Write a program to find factorial of a given number.
11. Write a program to find whether a given number is prime number or not.
12. Write a program to find reverse of a given number.
13. Write a program to enter whether a given number is odd or even.
14. Write a program to check whether a entered number is palindrome or not.
15. Write a program to print odd numbers from 1..100
16. Write a program to swap two given numbers.
17. Write a PL/SQL code accept date from system and find the day of the date. If the day is saturday display the message “The weekend has started”, if the day is sunday display the message “The Weekend is nearly over”, otherwise display the message “The weekend has not started yet”.
18. Create a table called “squareroots” having the columns number, sqroot. Insert square roots of numbers from 1 to 100 into the table by using PL/SQL code.
19. Write a program that declares an integer variable called num, assigns a value to it, and computes and inserts into the tempp table the value of the variable itself, its square, and its cube.
20. Convert a temperature in Fahrenheit (F) to its equivalent in Celsius (C) and vice versa. The required formulae are:-

C= (F-32)\*5/9

F= 9/5\*C + 32

Display the output on the screen using dbms\_output.put\_line. Data has to be input by the user.

1. Convert a number of inches into yards, feet, and inches. For example, 124 inches equals 3 yards, 1 foot, and 4 inches. Display the output on the screen using dbms\_output.put\_line. Data has to be input by the user.
2. Input a number and determine whether it is within a given range (for example, between 1 and 10). The low and high values of the range may be input by the user rather than be fixed by the program. Display the output on the screen using dbms\_output.put\_line.
3. Input three positive integers representing the sides of a triangle, and determine whether they form a valid triangle. Hint: In a triangle, the sum of any two sides must always be greater than the third side. Display the output on the screen using dbms\_output.put\_line.
4. Check if a given a year is a leap year. The condition is:-

year should be (divisible by 4 and not divisible by 100) or (divisible by 4 and divisible by 400.) Display the output on the screen using dbms\_output.put\_line. The year should be input by the user.

1. Write a program that asks the user to input two character strings. Your program should then determine if one character string exists inside another character string. Display the above on the screen using dbms\_output.put\_line.
2. A company manufactures three products:- computer stationery, fixed disks and computers. The following codes are used to indicate them:-

Product Code

Computer Stationery 1

Fixed Disks 2

Computers 3

The company has a discount policy as follows:-

Product Order amount Discount rate

Computer stationery Rs. 5000 or more 12%

Computer stationery Rs. 3000 or more 8%

Computer stationery Below Rs. 3000 2%

Fixed disks Rs. 20000 or more 10%

Fixed disks Rs. 15000 or more 5%

Computers Rs. 50000 or more 10%

Computers Rs. 25000 or more 5%

Write a program to accept the order details i.e. product code and order amounts for the products, calculate the discount amounts as per this policy and output the net order amount. Display the output on the screen using dbms\_output.put\_line.

1. Write a program that examines all the numbers from 1 to 999, displaying all those for which the sum of the cubes of the digits equal the number itself. Display the output on the screen using dbms\_output.put\_line.
2. Allow any positive integer to be typed in. The program should count how many times the number has to be doubled before it reaches 1 million. Display the results on the screen using dbms\_output.put\_line.
3. Program to accept a variable length word. This requires determining how many characters are read in. clue: use exit when not in loop
4. Write a program to read in a number and print it out digit by digit, as a series of words. For example, the number 523 would be printed as "five two three". Use decode function within a for loop. Display the results on the screen using dbms\_output.put\_line.

The CUSTOMER table of a state electricity board consists of the following fields:-

Meter Number Varchar2 4

Meter Type Character 1

Previous Reading Number 5

Current Reading Number 5

Customer Type Character 1

Last Bill payment Character 1 (values could be ?Y? or ?N?)

There are two types of meters viz. 3- phase or 1-phase coded as ?T? or ?S? respectively. There are 4 types

of customers viz. Agricultural Industrial, Commercial and Residential with coeds ?A? , ?I?, ?C? and ?R?

respectively.

Formulae:-

Units used = Current Reading ? Previous Reading

Rate =Rs.1/ 1.25/ 1.50/ 1.30 for A/I/C/R respectively.

Amount = rate\*units used

Surcharge = 5% for single phase

10% for 3 phase

Excise = 30% of (amount +Surcharge)

Net = Amount +Surcharge + Excise

Write a block to calculate the bill for each customer. The program should insert the Meter no., Units used, Rate, Amount, Surcharge, Excise duty and Net for each customer into some other suitable table. Also, at the end, it should insert the total Amount, Surcharge, Excise and Net into some other table.

1. A table consists of the following fields:-

Invoice Number Varchar2 4

Invoice Date Date

Customer Code Number 1

Product Code Number 1

Quantity Sold Number 3

There are ten customers with codes 0 to 9 and five products with codes 0 to 4. The rates of products are Rs. 15, 35, 42, 51 and 60 respectively. Write a program to find the total purchase in Rs. of each customer and total sale of each product using this table and insert these values in two other tables.

1. Create a table EMPLOYEE with the following columns:-

Employee No. Varchar2 4

Employee Name Varchar2 30

Designation Varchar2 10

Category Character 1

Basic Salary Number 4

Category may be ?J?, ?S?, or ?W? for Jr. officers, Sr. officers or Worker category.

Formulae:-

DA = 35% of Basic Salary correct up to paise.

HRA = 15% of Basic Salary subject to a maximum of Rs. 250/1000/30000 for categories W/J/S respectively.

Gross = Basic Salary +DA +HRA

Output the Employee Number and the Gross for each employee in a separate table.

1. Create a function that accepts a string of n characters and exchanges the first character with the last, the second with the next ? to? last, and so forth until n exchanges have been made. What will the final string look like? Write the function to verify your conclusion. Display the results on the screen using dbms\_output.put\_line.
2. a) WAF which accepts the name from user and returns the length of that name.

b) Write a function to display whether the inputed employee no is exists or not.

1. Write a stored procedure by the name of Comp\_intr to calculate the amount of interest on a bank

account that compounds interest yearly. The formula is:-

I = p (1+ r/100) y ? p

where:-

I is the total interest earned.

p is the principal.

r is the rate of interest as a decimal less than 1, and

y is the number of years the money is earning interest.

Your stored procedure should accept the values of p, r and y as parameters and insert the Interest and Total amount into tempp table.

1. Create a stored function by the name of Age\_calc. Your stored function should accept the date of birth of a person as a parameter. The stored function should calculate the age of the person in years, months and days e.g. 35 years, 3 months, 17 days. The stored function should return the age in years directly (with the help of Return statement). The months and days are to be returned indirectly in the form of OUT parameters. Write a PL\*SQL block to accept the date of birth of an employee from the user, call the stored function, and display the age of the employee on the screen. Display the above results on the screen using dbms\_output.put\_line.
2. Create the following 3 tables and insert sample data as shown:-

Ord\_mst

Ord\_no Cust\_cd Status

1 C1 P

Ord\_dtl

Ord\_no Prod\_cd Qty

1 P1 100

1 P2 200

Prod\_mst

Prod\_cd Prod\_name Qty\_in\_stock Booked\_qty

P1 Floppies 10000 1000

P2 Printers 5000 600

P3 Modems 3000 200

Write a Before Insert trigger on Ord\_dtl. Anytime a row is inserted in Ord\_dtl, the Booked\_qty in Prod\_mst should be increased accordingly.

1. Write a Before Delete trigger on Ord\_dtl. Anytime a row is deleted from Ord\_dtl, the Booked\_qty in

Prod\_mst should be decreased accordingly.

1. Write a Before Update of Prod\_cd, Qty trigger on Ord\_dtl. Anytime the Prod\_cd or Qty is updated, the Booked\_qty in Prod\_mst should be increased/decreased accordingly.
2. Write a function which accept the department no and returns maximum salary of that department. Handle the error if deptno does not exist or select statement return more than one row. EMP(Empno, deptno, salary)
3. Create a cursor for the emp table. Produce the output in following format: {empname} employee working in department {deptno} earns Rs. {salary}. EMP(empno, empname, salary, deptno);
4. Create a cursor for updating the salary of emp work ing in deptno 10 by 20%. If any rows are affected than display the no of row s affected. Use implicit cursor.
5. Create a cursor for updating the salary of emp work ing in deptno 10 by 20%. Use explicit cursor. EMP(empno, empname, salary, deptno);