

# PL\*SQL

## Exercise 3

1. 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`.
2. 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`.
3. 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.
4. Ask the user to enter the weight of an apple box. If the  
weight is  $\geq 10$  kg, rate =Rs. 5/kg  
weight is  $< 10$  kg, rate = Rs. 7/kg  
Calculate the cost of the apple box. Display the output on the screen using `dbms_output.put_line`.
5. Program should accept the age of the user. Depending upon the following conditions it should output:-  
age  $< 18$  years, "child"  
age  $\geq 18$  years and  $< 21$  years, "major"  
age  $\geq 21$  years "adult"  
Display the output on the screen using `dbms_output.put_line`.
6. 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`.
7. Suppose the grade obtained by a student depends upon his scores and the grading rule is as follows. :-

<u>Scores</u>	<u>Grades</u>
95-100	A
85-94	B
70-84	C
60-69	D
0-59	E

Write a block to accept a student's marks and accordingly output his grade. Display the output on the screen using `dbms_output.put_line`.

8. A company manufactures three products:- computer stationery, fixed disks and computers. The following codes are used to indicate them:-

<u>Product</u>	<u>Code</u>
Computer Stationery	1
Fixed Disks	2
Computers	3

The company has a discount policy as follows:-

<u>Product</u>	<u>Order amount</u>	<u>Discount rate</u>
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`.