

PL*SQL

Exercise 6

1. The **median** of an array of numbers is the element m of the array such that half the remaining numbers in the array are greater than or equal to m and half are less than or equal to m , if the number of elements in the array is odd. If the number of elements is even, the median is the average of the two elements $m1$ and $m2$ such that half the remaining elements are greater than or equal to $m1$ and $m2$, and half the elements are less than or equal to $m1$ and $m2$. Write a PL*SQL block that allows the user to enter 10 elements in a number array and outputs the median of the numbers in the array. Write another PL*SQL block that allows the user to enter 11 elements in a number array and outputs the median of the numbers in the array. Display the outputs on the screen using `dbms_output.put_line`.
2. The **mode** of an array of numbers is the number m in the array that is repeated most frequently. If more than 1 number is repeated with equal maximum frequencies, there is no mode. Write a PL*SQL block that allows the user to enter 10 elements in a number array and outputs the mode or indication that the mode does not exist. Display the above output on the screen using `dbms_output.put_line`.
3. Write a PL*SQL block to accept a number from the user. With the help of PL*SQL arrays, write a program for Number to word conversion up to 99 crores. The program should cater to Rs. and paise also.

For example, if the user enters:-

123451250.75

The output of your program should be:-

Rs. Twelve crores, Thirty Four lakhs, Fifty One thousand, Two hundred and Fifty and Seventy five paise only.

If the user enters:-

9728

The output of your program should be:-

Rs. Nine thousand, Seven hundred and Twenty Eight only.

4. Write a PL*SQL block to accept a character string from the user. The user should enter a number spelt out. With the help of PL*SQL arrays, write a program for Word to number conversion up to 99 crores. The program should cater to Rs. and paise also.

For example, if the user enters:-

Rs. Twelve crores, Thirty Four lakhs, Fifty One thousand, Two hundred and Fifty and Seventy five paise only.
The output of your program should be:-
123451250.75

If the user enters:-
Rs. Nine thousand, Seven hundred and Twenty Eight only.
The output of your program should be:-
9728