St. Xavier's College(Autonomous)

Computer Science Department

Practical Assignment Sheet-2 on PL/SQL

1. Define 1-dimensional array num() to store 5 elements. Calculate and print the follow ing: (i) sum of all elements. (ii) Maximum, Minimum elements, (iii) Average or all elements, (iv) Standard Deviation. Print all results.

2. Dehne 1 -dimensional array a() to store 5 elements. Calculate and print frequency of each number.

Display Frequency of each element in the list

3. Define 1-dimensional array a() to store 5 arbitrary numbers. Apply Bubble Sort algorithm to sort numbers in ascending order. Display Unsorted List after that display partially sorted List after every pass and then finally Display the sorted list.

4.Define 1-dimensional array a() and store 5 arbitrary numbers in it. Input a number(num) to be searched in that list. Apply (i) Linear search method to search whether the number found or not in the list.

(ii) Modify the program to implement Binary Search method to search a number in the sorted list.

5. Create a table table1 a consisting following fields; (i) emp id number(3) primary key. (ii) name varchar(30), (iii)basic number(6), (iv) da number(6), (v)hra number(6), (yi) pf number(6), (vii)gross number(6), (viii)net number(6). Write PL/SQL Code to insert at least 10 records in fields (i), (ii) and (iii). After that calculate and replace the other fields as follows:

(iv) da=30% of basic, (v) hra 15% of basicpay subject to a maximum o1 2000, (vi)pf =8.33% of (basic+da), (vii)gross=basic+da+hra, (viii) net=gross-pf. Display all records and also total number of records in tablela.

6. Create a table 'table1b' whlch should contain the following fields: (i) roll number(5) primary key, (ii) name varchar(30), (iii) p1 number(3) ,(iv) p2 number(3), (v) t number(3), (vi) av number(3), (vii) div varchar(5).

Write a program in PL/SQL to enter at least 10 sets of data in field-(i) to field-(iv). After adding data then calculate the rcmairlilig fields as follows:

(v) t =p1 +p2, (vi) av=t/2,

(vii) div='1st' if av>=60, div='2nd' if av>=50, div='3rd' if av>=40, div='Fail' if av<40.

If p1<40 or p2<40 then also div='Fail'.

Write another program in PL/SQL to define a Cursor say' marks' to store entire table data in that cursor. Calculate the following:

(i) Number of students got 1st div , 2nd div, 3rd div and 'Fail'. (ii) Display highest total marks and also lowest total marks. Display all records on screen.