**Practical No. 7**

**Aim:- Introduction of windowing.**

**1.) 2 types:**

**-Range between start\_point and end\_point**

**-Rows between start\_point and end\_point**

**2.) Possible values for start point for end\_point are:**

**2.1) unbounded preceding:**

**windows start as first rows of partition or entire result set if partition clause are not use. Only available for start point.**

**2.2) unbounded following:**

**The window ends at the last row of partition or partition clause are not use. Only available for end point.**

**2.3) Current row:**

**The window start and end at the current row can be use as start or end point.**

**2.4) value expression preceding:**

**A physical or logical offset before the current row using a constant or expression positive numerical values. When use in range it can also be interval literal if the order by clause uses date column.**

**2.5) value expression following:**

**A physical or logical offset after the current row using a constant or expression positive numerical values. When use in range it can also be interval literal if the order by clause uses date column.**

**For the analytic function that support analytic clause it use default clause:**

**-Range between unbounded preceding current row.**

**Q.) find out avg dept salary and make partition as dept.**

SQL> select emp\_id,emp\_name,dept\_num,salary,avg(salary) over (partition by dept\_

num) as newsal from employee;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEWSAL

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101 sujit 201 25000 25000

102 gaurav 201 25000 25000

103 ankul 202 20000 17500

105 neeraj 202 15000 17500

106 mani 203 35000 27500

104 adarsh 203 20000 27500

107 priya 204 30000 32500

108 ankita 204 35000 32500

110 reeta 205 35000 35000

109 gautami 205 35000 35000

**Q.) Display emp\_id,emp\_name,dept\_num,salary and sum of salary for there earlier row and one next row as per the dept\_num.**

SQL> select emp\_id,emp\_name,dept\_num,salary,sum(salary) over (partition by dept\_

num order by salary rows between 3 preceding and 1 following) as new\_sal from em

ployee order by dept\_num,salary;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEW\_SAL

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101 sujit 201 25000 50000

102 gaurav 201 25000 50000

105 neeraj 202 15000 35000

103 ankul 202 20000 35000

104 adarsh 203 20000 55000

106 mani 203 35000 55000

107 priya 204 30000 65000

108 ankita 204 35000 65000

110 reeta 205 35000 70000

109 gautami 205 35000 70000

**Q.) Display emp\_num,emp\_name,dept\_num,salary,sum of salary for all preceding row and current row.**

SQL> select emp\_id,emp\_name,dept\_num,salary,sum(salary) over (partition by dept\_

num order by salary rows between unbounded preceding and current row) as new\_sal

from employee order by dept\_num,salary;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEW\_SAL

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101 sujit 201 25000 25000

102 gaurav 201 25000 50000

105 neeraj 202 15000 15000

103 ankul 202 20000 35000

104 adarsh 203 20000 20000

106 mani 203 35000 55000

107 priya 204 30000 30000

108 ankita 204 35000 65000

110 reeta 205 35000 35000

109 gautami 205 35000 70000

**Q.) Display emp\_num,emp\_name,dept\_num,salary,sum of salary for 1 following and 3 following as dept\_num.**

SQL> select emp\_id,emp\_name,dept\_num,salary,sum(salary) over (partition by dept\_

num order by salary rows between 3 following and 1 following) as new\_sal from em

ployee order by dept\_num,salary;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEW\_SAL

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101 sujit 201 25000 25000

102 gaurav 201 25000 25000

105 neeraj 202 15000 15000

103 ankul 202 20000 20000

104 adarsh 203 20000 20000

106 mani 203 35000 35000

107 priya 204 30000 30000

108 ankita 204 35000 35000

110 reeta 205 35000 35000

109 gautami 205 35000 35000

**Q.)** **Display emp\_num,emp\_name,dept\_num,salary,sum of salary for** **rows between 1 preceding and current row and Rows between current row and 1 following.**

SQL> select emp\_id,emp\_name,dept\_num,salary,sum(salary) over (partition by dept\_

num order by salary rows between 1 preceding and current row) as new\_sal from em

ployee order by dept\_num,salary;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEW\_SAL

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101 sujit 201 25000 25000

102 gaurav 201 25000 50000

105 neeraj 202 15000 15000

103 ankul 202 20000 35000

104 adarsh 203 20000 20000

106 mani 203 35000 55000

107 priya 204 30000 30000

108 ankita 204 35000 65000

110 reeta 205 35000 35000

109 gautami 205 35000 70000

SQL> select emp\_id,emp\_name,dept\_num,salary,sum(salary) over (partition by dept\_

num order by salary rows between current row and 1 following) as new\_sal from em

ployee order by dept\_num,salary;

EMP\_ID EMP\_NAME DEPT\_NUM SALARY NEW\_SAL

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101 sujit 201 25000 50000

102 gaurav 201 25000 25000

105 neeraj 202 15000 35000

103 ankul 202 20000 20000

104 adarsh 203 20000 55000

106 mani 203 35000 35000

107 priya 204 30000 65000

108 ankita 204 35000 35000

110 reeta 205 35000 70000

109 gautami 205 35000 35000