1. Lets we take a new page and Create a New Report Region in it named "ManualGrid". Follow fig : 1,2,3

Fig: 1

Fig: 2
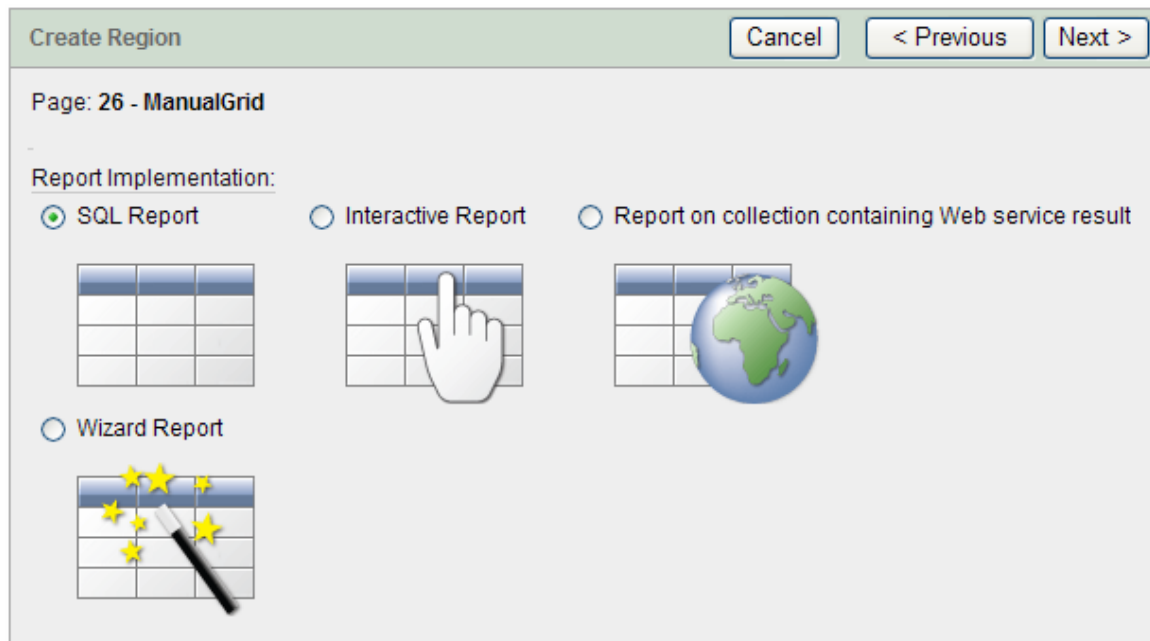
Fig: 3

2. In SQL Query type the below SQL Statement :

```
SELECT

        APEX_ITEM.TEXT(1,EMPNO,10,30) AS EMPNO,
        APEX_ITEM.TEXT(2,ENAME,10,30) AS ENAME,
        APEX_ITEM.TEXT(3,JOB,10,30) AS JOB,
        APEX_ITEM.TEXT(4,MGR,10,30) AS MGR,
        APEX_ITEM.TEXT(5,HIREDATE,10,30) AS HIREDATE,
        APEX_ITEM.TEXT(6,SAL,10,30) AS SAL,
        APEX_ITEM.TEXT(7,COMM,10,30) AS COMM,
        APEX_ITEM.TEXT(8,DEPTNO,10,30) AS DEPTNO,
        apex_item.checkbox(9,EMPNO,'UNCHECKED') AS CHECKBOX

FROM EMP

UNION ALL

SELECT
        APEX_ITEM.TEXT(1,NULL,10,30) AS EMPNO,
        APEX_ITEM.TEXT(2,NULL,10,30) AS ENAME,
        APEX_ITEM.TEXT(3,NULL,10,30) AS JOB,
        APEX_ITEM.TEXT(4,NULL,10,30) AS MGR,
        APEX_ITEM.TEXT(5,NULL,10,30) AS HIREDATE,
        APEX_ITEM.TEXT(6,NULL,10,30) AS SAL,
        APEX_ITEM.TEXT(7,NULL,10,30) AS COMM,
        APEX_ITEM.TEXT(8,NULL,10,30) AS DEPTNO,
        apex_item.checkbox(9,NULL,'UNCHECKED') AS CHECKBOX

FROM DUAL
```

Fig: 4

3. After typing the above SQL statement when you run the page it will look like Fig :5. Here we can see the blank row showing a the top . If we want to put the blank row at the bottom then go to the report properties as showing in Fig:6 uncheck checkbox of the sort column and keep the sort sequence as shown in fig:6. After completing this step the report will look like in fig : 7

EmpInfo

EMPNO▲	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CHECKBOX
								☐
7369	SMITH	CLERK	7902	17-DEC-80	800		20	☐
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	☐
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	☐
7566	JONES	MANAGER	7839	02-APR-81	2975		20	☐
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	☐
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30	☐
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10	☐
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20	☐
7839	KING	PRESIDENT		17-NOV-81	5000		10	☐
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30	☐
7876	ADAMS	CLERK	7788	12-JAN-83	1100		20	☐
7900	JAMES	CLERK	7698	03-DEC-81	9500		30	☐
7902	FORD	ANALYST	7566	03-DEC-81	3000		20	☐
7934	MILLER	CLERK	7782	23-JAN-82	1300		10	☐

1 - 15

Fig: 5

Column Attributes

Headings Type: ⦿ Column Names ◯ Column Names (InitCap) ◯ Custom ◯ PL/SQL ◯ None

	Alias	Link Edit	Heading	Column Alignment	Heading Alignment	Show	Sum	Sort	Sort Sequence	
✎	EMPNO		EMPNO	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	ENAME		ENAME	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	JOB		JOB	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	MGR		MGR	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	HIREDATE		HIREDATE	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	SAL		SAL	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	COMM		COMM	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	DEPTNO		DEPTNO	left ▾	▾	☑	☐	☐	- ▾	△▽
✎	CHECKBOX		CHECKBOX	left ▾	▾	☑	☐	☐	- ▾	△▽

When moving the last column further down, it will show up as the first column of your report.
When moving the first column up, it will be moved to the end of your report.

Fig: 6

EmpInfo

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CHECKBOX
7839	KING	PRESIDENT		17-NOV-81	5000		10	☐
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30	☐
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10	☐
7566	JONES	MANAGER	7839	02-APR-81	2975		20	☐
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20	☐
7902	FORD	ANALYST	7566	03-DEC-81	3000		20	☐
7369	SMITH	CLERK	7902	17-DEC-80	800		20	☐
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	☐
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	☐
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	☐
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30	☐
7876	ADAMS	CLERK	7788	12-JAN-83	1100		20	☐
7900	JAMES	CLERK	7698	03-DEC-81	9500		30	☐
7934	MILLER	CLERK	7782	23-JAN-82	1300		10	☐
								☐

1 - 15

Fig : 7

4. Place three button Apply Record, Delete Record and Add row as shown in Fig :8. One change I have done here that records display per page. I have set 5 records per page. Now I want to press the "Add row" button and automatically it will take me to the Last record and a blank row will be created to insert record. We have created the blank row before hand. Now I have to jump to the last and blank records. In the Developer, we could something like :

```
-------------------------------
 go_block('emp');
Last_record;
Create_record;
-------------------------------
```

Now to go to the last_record we have to find out the region ID where the report resides. Follow fig: 9 to find out the region ID. Region ID will be something like : 6984517329071610. Now go to the Add row button properties as shown on fig: 12 Type as :

javascript:$a_report('6984517329071610',&HID_MAX_26.,5,5);

Now to find out the Last record or Max record in the table you need to create a process in the "On load- before header" and follow fig: 11. you can adjust this process code according to your choice of records displaying per page.
After completing this step when you press "Add row" button in fig: 13 you will be given to the last record in fig : 14 to create record.

EmpInfo

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CHECKBOX
7839	KING	PRESIDENT		17-NOV-81	5000		10	☐
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30	☐
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10	☐
7566	JONES	MANAGER	7839	02-APR-81	2975		20	☐
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20	☐

Apply Record   Delete Record

1 - 5 Next ▶

Add Row

Fig: 8

Fig : 9

Fig : 10

Fig : 11

Optional URL Redirect

Target is a `URL`

Page [   ] [∧]

☐ reset pagination for this page

Request [   ]

Clear Cache [   ] (comma separated page numbers)

Set These Items [   ] ✎ (comma separated name list)

With These Values [   ] ✎ (comma separated value list)

URL Target
```
javascript:$a_report('6984517329071610',&HID_MAX_26.,5,5);
```

Fig : 12

EmpInfo

[Apply Record] [Delete Record]

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CHECKBOX
7369	SMITH	CLERK	7902	17-DEC-80	800		20	☐
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30	☐
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30	☐
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30	☐
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30	☐

◄ Previous 7 - 11 Next ►

[Add Row]

Fig : 13

EmpInfo

[Apply Record] [Delete Record]

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	CHECKBOX
7876	ADAMS	CLERK	7788	12-JAN-83	1100		20	☐
7900	JAMES	CLERK	7698	03-DEC-81	9500		30	☐
7934	MILLER	CLERK	7782	23-JAN-82	1300		10	☐
								☐

◄ Previous 12 - 15

[Add Row]

Fig : 14

Page: **26 - ManualGrid**

* Name `insertUpdate`

* Sequence `10`

* Point `On Submit - After Computations and Validations`

* Type **PL/SQL anonymous block**

Fig : 15

5.   For update or insert record in create a process as shown fig: 16 ,17,18,19

Process to update / insert record:

```
declare
x number(10):=0;
begin
FOR i IN 1 .. apex_application.g_f01.COUNT
LOOP
select count(EMPNO) into x from emp where empno=apex_application.g_f01(i);
if x > 0 then
UPDATE EMP
SET
    ENAME=apex_application.g_f02(i),
    JOB=apex_application.g_f03(i),
    MGR=apex_application.g_f04(i),
    HIREDATE=apex_application.g_f05(i),
    SAL=apex_application.g_f06(i),
    COMM=apex_application.g_f07(i),
    DEPTNO=apex_application.g_f08(i)
WHERE EMPNO=apex_application.g_f01(i);
end if;

if x < 1  and apex_application.g_f01(i) is not null then

 INSERT INTO EMP
(EMPNO,ENAME,JOB,MGR,HIREDATE,SAL,COMM,DEPTNO)
VALUES(apex_application.g_f01(i),apex_application.g_f02(i),apex_application.g_f
03(i),apex_application.g_f04(i),apex_application.g_f05(i),apex_application.g_f06(i)
,apex_application.g_f07(i),apex_application.g_f08(i));
END IF;
END LOOP;
end;
```

Fig : 16

Fig : 17

Fig : 18

6.   To keep the check box at the first column follow fig: 18 and 19. Now to put a
      check box in the checkbox column header and check / uncheck all the row
      follow fig: 20 and place the code in the checkbox column header as :

`<input type="checkbox" onclick="$f_CheckFirstColumn(this)" />`
And see the final look in fig : 21.
For Delete process follow the fig: 22, 23,24

Fig : 19

Fig : 20

Fig : 21

```
* Enter PL/SQL Page Process
declare
x number(10):=0;
BEGIN

FOR i IN 1 .. apex_application.g_f09.COUNT
LOOP
 DELETE EMP WHERE EMPNO=apex_application.g_f09(i);
END LOOP;
END;
```

Fig : 22

Fig : 23

Fig : 24

End of document