Assignment 9

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Batch – 3ENC1

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1) WAP to find the greatest of three numbers.

SQL Worksheet

```
declare
 n1 number := 546;
 n2 number := 456;
 n3 number := -5423;
 greatest number;
begin
 if (n1 >= n2 and n1 >= n3) then
 greatest := n1;
 elsif (n2 >= n1 and n2 >= n3) then
 greatest := n2;
 else
 greatest := n3;
 end if;
 dbms_output.put_line('greatest = ' || greatest);
end;
```

```
Statement processed.
greatest = 546
```

2) WAP to find the grade. Consider the following:

Marks > 80 A grade, Marks >70 B grade, Marks >50 C grade, Marks > 40 D grade, Marks < 40 E grade

SQL Worksheet

```
declare
 marks number := 87;
 grade char(1);
begin
 if (marks > 80) then
 grade := 'A';
 elsif (marks > 70) then
 grade := 'B';
 elsif (marks > 50) then
 grade := 'C';
 elsif (marks > 40) then
 grade := 'D';
 else
 grade := 'E';
 end if;
 dbms_output.put_line('Grade = ' || grade);
end;
```

```
Statement processed.
Grade = A
```

3) WAP to print the table of a given number.(use for loop)

SQL Worksheet

```
declare
 n1 number := 18;
begin
 for i in 1..10 loop
 dbms_output.put_line(n1 || ' * ' || i || ' = ' || n1 * i);
 end loop;
end;
```

```
Statement processed.
18 * 1 = 18
18 * 2 = 36
18 * 3 = 54
18 * 4 = 72
18 * 5 = 90
18 * 6 = 108
18 * 7 = 126
18 * 8 = 144
18 * 9 = 162
18 * 10 = 180
```

4) WAP to find out the factorial of a given number.(use while loop)

```
declare
 og number := 6;
 temp number := og;
 ans number := 1;
begin
 while (temp >= 2) loop
 ans := ans * temp;
 temp := temp - 1;
 end loop;

 dbms_output.put_line(og || '! = ' || ans);
end;
```

```
Statement processed.
6! = 720
```

5) WAP to find the reverse of a number(use exit when stement)

SQL Worksheet

```
declare
 og number := 15646484;
 temp number := og;
 rev number := 0;
 x number;
begin
 loop
 exit when (temp = 0);
 x := mod(temp, 10);
 rev := (rev * 10) + x;
 temp := trunc(temp / 10);
 end loop;
 dbms_output.put_line('reverse of ' || og || ' = ' || rev);
end;
```

```
Statement processed.
reverse of 15646484 = 48464651
```

6) PL/SQL block to update total sal for empno 100 in Employee Table.

Table Employee: Eno,ename, bp,da,hra,total.

SQL Worksheet

```
create table employee(
 eno number,
 ename varchar2(20),
 bpay number,
 dallow number,
 hrallow number,
 total number
);
insert into employee values (101, 'Abhishek', 25000, 15000, 20000, 60000);
insert into employee values (102, 'Robin', 30000, 20000, 30000, 80000);
insert into employee values (103, 'Saksham', 25000, 30000, 30000, 85000);
insert into employee values (104, 'Mayur', 50000, 20000, 50000, 120000);
insert into employee values (105, 'Emily', 30000, 10000, 75000, 115000);
select * from employee;
```

ENO	ENAME	BPAY	DALLOW	HRALLOW	TOTAL
101	Abhishek	25000	15000	20000	60000
102	Robin	30000	20000	30000	80000
103	Saksham	25000	30000	30000	85000
104	Mayur	50000	20000	50000	120000
105	Emily	30000	10000	75000	115000

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7) PL/SQL block to calculate fine for rno 100

Rno, bookno, doi, dor, fine

Fine is rs 1 if days<7

Fine is rs 2 if days<14 and >7

Fine is rs 3 if days>14

Amount mentioned is for each day

SQL Worksheet

```
create table lib (
 rno number,
 bookno number,
 doi date,
 dor date as (doi + 7),
 fine number
);
insert into lib (rno, bookno, doi) values (1, 71, to_date('02-11-2021', 'DD-MM-YYYY'));
insert into lib (rno, bookno, doi) values (2, 251, to_date('07-11-2021', 'DD-MM-YYYY'));
insert into lib (rno, bookno, doi) values (3, 25, to_date('12-11-2021', 'DD-MM-YYYY'));
insert into lib (rno, bookno, doi) values (4, 3, to_date('15-11-2021', 'DD-MM-YYYY'));
insert into lib (rno, bookno, doi) values (5, 478, to_date('22-11-2021', 'DD-MM-YYYY'));
insert into lib (rno, bookno, doi) values (6, 187, to_date('27-11-2021', 'DD-MM-YYYY'));
select * from lib;
```

RNO	BOOKNO	DOI	DOR	FINE
1	71	02-NOV-21	09-NOV-21	-
2	251	07-NOV-21	14-NOV-21	-
3	25	12-NOV-21	19-NOV-21	-
4	3	15-NOV-21	22-NOV-21	-
5	478	22-NOV-21	29-NOV-21	-
6	187	27-NOV-21	04-DEC-21	-

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8) PL/SQL block that performs addition (+), subtraction (-), multiplication (*) and division (/) of two numbers as choice by the user.

SQL Worksheet

```
declare
 num1 number := 855;
 num2 number := 5;
 choice char(1) := '/';
 ans number;
begin
 if (choice = '+') then
 ans := num1 + num2;
 elsif (choice = '-') then
 ans := num1 - num2;
 elsif (choice = '*') then
 ans := num1 * num2;
 elsif (choice = '/') then
 ans := num1 / num2;
 end if;
 dbms_output.put_line(num1 || ' ' || choice || ' ' || num2 || ' = ' || ans);
end;
```

```
Statement processed.
855 / 5 = 171
```

9) PI/SQL block to display welcome message like good morning, good afternoon, good night depending on system time.

SQL Worksheet

```
declare
 hr number;
begin
 dbms_output.put_line('Current Time: ' || to_char(sysdate, 'HH:MI AM'));
 hr := to_number(trim(to_char(sysdate, 'HH24')), '99');
 if (hr >= 6 and hr <= 12) then
 dbms_output.put_line('Good Morning !');
 elsif (hr >= 12 and hr <= 19) then
 dbms_output.put_line('Good Afternoon !');
 else
 dbms_output.put_line('Good Night !');
 end if;
end;
```

```
Statement processed.
Current Time: 05:00 PM
Good Afternoon !
```