**Programming Basics Assignments**

1. Write a plsql block to accept the empno from the user. Raise the salary of that employee by 20% and display the raised salary. (Note - Do not update the salary, just display the changed salary)

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| **DECLARE**  **X EMP.EMPNO%TYPE;**  **Y EMP.SAL%TYPE;**  **BEGIN**  **X:=&EMPNO;**  **SELECT SAL INTO Y FROM EMP WHERE EMPNO=X;**  **Y:=Y+0.2\*Y;**  **DBMS\_OUTPUT.PUT\_LINE('RAISED SALARY IS '|| Y);**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

2) Accept job type from the user. Display the message depending upon whether

no rows or one row or several rows are selected.

The message should be any one from the below 3 as per the situation.

JOB TYPE FOUND ONCE

JOB TYPE FOUND MORE THAN ONCE

JOB TYPE NOT FOUND

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| **DECLARE**  **X EMP.JOB%TYPE;**  **Y INT;**  **BEGIN**  **X:='&JOB';**  **SELECT COUNT(\*) INTO Y FROM EMP WHERE JOB=X;**  **IF Y=1 THEN**  **DBMS\_OUTPUT.PUT\_LINE('JOB TYPE FOUND ONCE');**  **ELSIF Y>1 THEN**  **DBMS\_OUTPUT.PUT\_LINE('JOB TYPE FOUND MORE THAN ONCE');**  **ELSE**  **DBMS\_OUTPUT.PUT\_LINE('JOB TYPE FOUND NOT FOUND');**  **END IF;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

3) Using basic loop technique display all the multiples of 7 between 31 and 48.

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| **DECLARE**  **X INT:=7;**  **Y INT;**  **BEGIN**  **LOOP**  **EXIT WHEN X>48;**  **Y:=REMAINDER(X,7);**  **IF Y=0 AND X>31 AND X<48 THEN**  **DBMS\_OUTPUT.PUT\_LINE(X);**  **END IF;**  **X:=X+7;**  **END LOOP;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

4) Write a block to accept the Empno from the user and change the salary according to the following condition. If salary is in the range of

RANGE INCREMNENT

1000 – 2000 500

2001 –3000 1000

3001 – 4000 1500

>4000 2000

(Note - Do not update the salary, just display the changed salary)

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| --- |
| **DECLARE**  **X EMP.EMPNO%TYPE;**  **Y EMP.SAL%TYPE;**  **BEGIN**  **X:=&EMPNO;**  **SELECT SAL INTO Y FROM EMP WHERE EMPNO=X;**  **IF Y>=1000 AND Y<=2000 THEN**  **Y:=Y+500;**  **ELSIF Y>=2001 AND Y<=3000 THEN**  **Y:=Y+1000;**  **ELSIF Y>=3001 AND Y<=4000 THEN**  **Y:=Y+1500;**  **ELSIF Y>4000 THEN**  **Y:=Y+2000;**  **ELSE**  **Y:=Y+0;**  **END IF;**  **DBMS\_OUTPUT.PUT\_LINE('REVISED SALARY IS ' || Y);**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

5) Create a table Inspection\_Details\_*EmployeeID* that has one column Readings of numeric type.

Using pl/sql block add numbers, which has the difference of 0.1. The numbers should be between 0.1 and 6.8.

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| **DROP TABLE INSPECTION\_DETAILS\_EMPLOYEEID IF EXISTS;**  **CREATE TABLE INSPECTION\_DETAILS\_EMPLOYEEID(READING NUMBER);**  **DECLARE**  **X NUMBER;**  **BEGIN**  **X:=0.1;**  **LOOP**  **EXIT WHEN X>6.8;**  **INSERT INTO INSPECTION\_DETAILS\_EMPLOYEEID VALUES(X);**  **X:=X+0.1;**  **END LOOP;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;**  **--RUN SEPARATELY**  **SELECT \* FROM INSPECTION\_DETAILS\_EMPLOYEEID;** |

6) Through while loop display the multiples of 7 till 70 in the descending order.

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| **DECLARE**  **X INT:=70;**  **BEGIN**  **WHILE X>0**  **LOOP**  **DBMS\_OUTPUT.PUT\_LINE(X);**  **X:=X-7;**  **END LOOP;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

7) Display the difference of salary between the oldest and the latest employee.

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| **DECLARE**  **OLDSAL EMP.SAL%TYPE;**  **NEWSAL EMP.SAL%TYPE;**  **DIFF EMP.SAL%TYPE;**  **BEGIN**  **SELECT SAL INTO OLDSAL FROM EMP WHERE HIREDATE=(SELECT MIN(HIREDATE) FROM EMP);**  **SELECT SAL INTO NEWSAL FROM EMP WHERE HIREDATE=(SELECT MAX(HIREDATE) FROM EMP);**  **DIFF:=ABS(OLDSAL-NEWSAL);**  **DBMS\_OUTPUT.PUT\_LINE('DIFFERENCE OF SALARY BETWEEN THE OLDEST AND THE LATEST EMPLOYEE IS ' || DIFF);**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

8) Create the table tx1 with the following script.

Create table Oracle\_Batch(student\_name varchar (20);

Create a program that will accept the student\_name form the user and if the user has entered all the characters as alphabets only then enter that name into the Oracle\_Batch table.

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| **DECLARE**  **Y ORACLE\_BATCH.STUDENT\_NAME%TYPE:='&STUDENT\_NAME';**  **Z INT:=0;**  **S CHAR;**  **BEGIN**  **FOR X IN 1 .. LENGTH(Y)**  **LOOP**  **SELECT SUBSTR(Y , X , 1 ) INTO S FROM DUAL;**  **IF ((S >= 'a' AND S <= 'z') OR (S >= 'A' AND S <= 'Z')) THEN**  **Z:=Z;**  **ELSE**  **Z:=1;**  **END IF;**  **END LOOP;**  **IF Z=1 THEN**  **DBMS\_OUTPUT.PUT\_LINE('ALL THE CHARACTERS ARE NOT ALPHABETS');**  **ELSE**  **DBMS\_OUTPUT.PUT\_LINE('ALL THE CHARACTERS ARE ALPHABETS');**  **END IF;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |

9) Write a PL/SQL code to accept an employee number from the user and display whether it is exists or not .

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| **DECLARE**  **X EMP.EMPNO%TYPE;**  **Y INT;**  **BEGIN**  **X:='&EMPNO';**  **SELECT COUNT(\*) INTO Y FROM EMP WHERE EMPNO=X;**  **IF Y=1 THEN**  **DBMS\_OUTPUT.PUT\_LINE('EMPLOYEE EXISTS');**  **ELSE**  **DBMS\_OUTPUT.PUT\_LINE('EMPLOYEE DOES NOT EXISTS');**  **END IF;**  **EXCEPTION**  **WHEN OTHERS THEN**  **DBMS\_OUTPUT.PUT\_LINE('ERROR OCCURED CONTACT DBA');**  **END;** |