**Temă 8 Lab SGBD 15.12.2024**

**Șerba Ioana Raluca grupa 241**

**Cerință:**

* Rezolvati ex E6 din Laborator PLSQL7.pdf. inceput la laborator,  
  Se va tine cont de toate exceptiile discutate la laborator in aceasta saptamana, exceptii precum no\_data\_found, too\_many\_rows etc. Rezolvati problema in 2 moduri:
* unul cu un bloc principal si toate select-urile de care aveti nevoie se gasesc in blocul principal si va veti folosi de exceptii declansate automat sau explicit prin clauza de raise
* **Cod sursă:**

*-------------------------------------------------  
--selecturi de verificare date*SELECT L.LOCATION\_ID, COUNT(D.DEPARTMENT\_ID)  
FROM LOC\_RS L  
LEFT OUTER JOIN DEPT\_RS D ON D.LOCATION\_ID = L.LOCATION\_ID  
GROUP BY L.LOCATION\_ID;  
  
SELECT L.LOCATION\_ID, D.DEPARTMENT\_ID  
FROM LOC\_RS L  
LEFT OUTER JOIN DEPT\_RS D ON D.LOCATION\_ID = L.LOCATION\_ID;  
  
/  
*--E6 v1 un bloc principal*ACCEPT p\_loc PROMPT 'Dati locatia: '  
ACCEPT p\_dept PROMPT 'Dati codul departamentul: '  
*--*DECLARE  
 v\_loc LOC\_RS.location\_id%TYPE:= &p\_loc; *-- id sau nume??* v\_nume DEPT\_RS.department\_name%TYPE;  
 V\_dept DEPT\_RS.DEPARTMENT\_ID%TYPE := &p\_dept;  
 V\_COUNT NUMBER (3);  
 EXC\_NO\_DEPT\_IN\_LOC EXCEPTION;  
 EXC\_NO\_LOC EXCEPTION;  
 EXC\_DEPT\_NOT\_FOUND EXCEPTION;  
  
BEGIN  
 *--daca exista locatia* SELECT COUNT(LOCATION\_ID)  
 INTO V\_COUNT  
 FROM LOC\_RS  
 WHERE LOCATION\_ID = V\_LOC;  
   
 IF V\_COUNT = 0 THEN  
 RAISE EXC\_NO\_LOC; *-- exceptie explicita* END IF;  
  
 *--daca locatia are dept* SELECT COUNT(D.DEPARTMENT\_ID)  
 INTO V\_COUNT  
 FROM LOC\_RS L  
 LEFT OUTER JOIN DEPARTMENTS D ON L.LOCATION\_ID = D.LOCATION\_ID  
 WHERE L.LOCATION\_ID = V\_LOC  
 GROUP BY L.LOCATION\_ID;  
  
 IF V\_COUNT = 0 THEN  
 RAISE EXC\_NO\_DEPT\_IN\_LOC; *-- exceptie explicita* END IF;  
   
   
 *--daca exista dept ce se afla intr o anumita locatie* SELECT COUNT(DEPARTMENT\_ID)  
 INTO V\_COUNT  
 FROM DEPT\_RS  
 WHERE DEPARTMENT\_ID = V\_DEPT  
 AND LOCATION\_ID = V\_LOC;  
   
 IF V\_COUNT = 0 THEN  
 RAISE EXC\_DEPT\_NOT\_FOUND;  
 END IF;  
   
 *-- nume dept ce se afla intr o anumita locatie* SELECT DEPARTMENT\_NAME  
 INTO V\_NUME  
 FROM DEPT\_RS  
 WHERE DEPARTMENT\_ID = V\_DEPT  
 AND LOCATION\_ID = V\_LOC;  
   
 DBMS\_OUTPUT.PUT\_LINE('Departamentul se numeste: '|| V\_nume);  
   
   
   
EXCEPTION  
 WHEN EXC\_NO\_DEPT\_IN\_LOC THEN  
 RAISE\_APPLICATION\_ERROR(-20001,'Nu exista departamente in locatia data');  
 WHEN EXC\_NO\_LOC THEN  
 RAISE\_APPLICATION\_ERROR(-20002,'Nu exista locatia');  
 WHEN EXC\_DEPT\_NOT\_FOUND THEN  
 RAISE\_APPLICATION\_ERROR(-20003,'Nu exista departament cu acel id in locatia data');  
 WHEN TOO\_MANY\_ROWS THEN  
 RAISE\_APPLICATION\_ERROR(-20004,'Prea multe linii');  
 WHEN OTHERS THEN  
 RAISE\_APPLICATION\_ERROR(-20005,'Au aparut alte erori');  
END;  
/

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* cealalt mod va utiliza mai multe sublbocuri ce au fiecare cate o zona de tratare a exceptiilor.
* Cod sursă  
    
  *--E6 v2 subblocuri*ACCEPT p\_loc PROMPT 'Dati locatia: '  
  ACCEPT p\_dept PROMPT 'Dati codul departamentul: '  
  *--*DECLARE  
   v\_loc LOC\_RS.location\_id%TYPE:= &p\_loc;   
   V\_dept DEPT\_RS.DEPARTMENT\_ID%TYPE := &p\_dept;  
   V\_COUNT NUMBER (3);  
    
  BEGIN  
   *--daca exista locatia* DECLARE  
   EXC\_NO\_LOC EXCEPTION;  
   BEGIN  
   SELECT COUNT(LOCATION\_ID)  
   INTO V\_COUNT  
   FROM LOC\_RS  
   WHERE LOCATION\_ID = V\_LOC;  
     
   IF V\_COUNT = 0 THEN  
   RAISE EXC\_NO\_LOC; *-- exceptie explicita* END IF;  
   EXCEPTION  
   WHEN EXC\_NO\_LOC THEN  
   RAISE\_APPLICATION\_ERROR(-20002,'Nu exista locatia');  
   END;  
    
   *--daca locatia are dept* DECLARE  
   EXC\_NO\_DEPT\_IN\_LOC EXCEPTION;  
   BEGIN  
   SELECT COUNT(D.DEPARTMENT\_ID)  
   INTO V\_COUNT  
   FROM LOC\_RS L  
   LEFT OUTER JOIN DEPARTMENTS D ON L.LOCATION\_ID = D.LOCATION\_ID  
   WHERE L.LOCATION\_ID = V\_LOC  
   GROUP BY L.LOCATION\_ID;  
     
   IF V\_COUNT = 0 THEN  
   RAISE EXC\_NO\_DEPT\_IN\_LOC; *-- exceptie explicita* END IF;  
   EXCEPTION  
   WHEN EXC\_NO\_DEPT\_IN\_LOC THEN  
   RAISE\_APPLICATION\_ERROR(-20001,'Nu exista departamente in locatia data');  
   END;  
     
   *--daca exista dept ce se afla intr o anumita locatie* DECLARE  
   EXC\_DEPT\_NOT\_FOUND EXCEPTION;  
   BEGIN  
   SELECT COUNT(DEPARTMENT\_ID)  
   INTO V\_COUNT  
   FROM DEPT\_RS  
   WHERE DEPARTMENT\_ID = V\_DEPT  
   AND LOCATION\_ID = V\_LOC;  
     
   IF V\_COUNT = 0 THEN  
   RAISE EXC\_DEPT\_NOT\_FOUND;  
   END IF;  
   EXCEPTION  
   WHEN EXC\_DEPT\_NOT\_FOUND THEN  
   RAISE\_APPLICATION\_ERROR(-20003,'Nu exista departament cu acel id in locatia data');  
   END;  
     
   *-- nume dept ce se afla intr o anumita locatie* DECLARE  
   v\_nume DEPT\_RS.department\_name%TYPE;  
   BEGIN  
   SELECT DEPARTMENT\_NAME  
   INTO V\_NUME  
   FROM DEPT\_RS  
   WHERE DEPARTMENT\_ID = V\_DEPT  
   AND LOCATION\_ID = V\_LOC;  
     
   DBMS\_OUTPUT.PUT\_LINE('Departamentul se numeste: '|| V\_nume);  
   EXCEPTION  
   WHEN TOO\_MANY\_ROWS THEN  
   RAISE\_APPLICATION\_ERROR(-20004,'Prea multe linii');  
   END;  
     
  EXCEPTION  
   WHEN OTHERS THEN  
   RAISE\_APPLICATION\_ERROR(-20006,'Au o eroare: ' || SQLERRM); *--se propaga din subblocuri  
   --din cauza ca fac raise appl error*END;  
  /
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