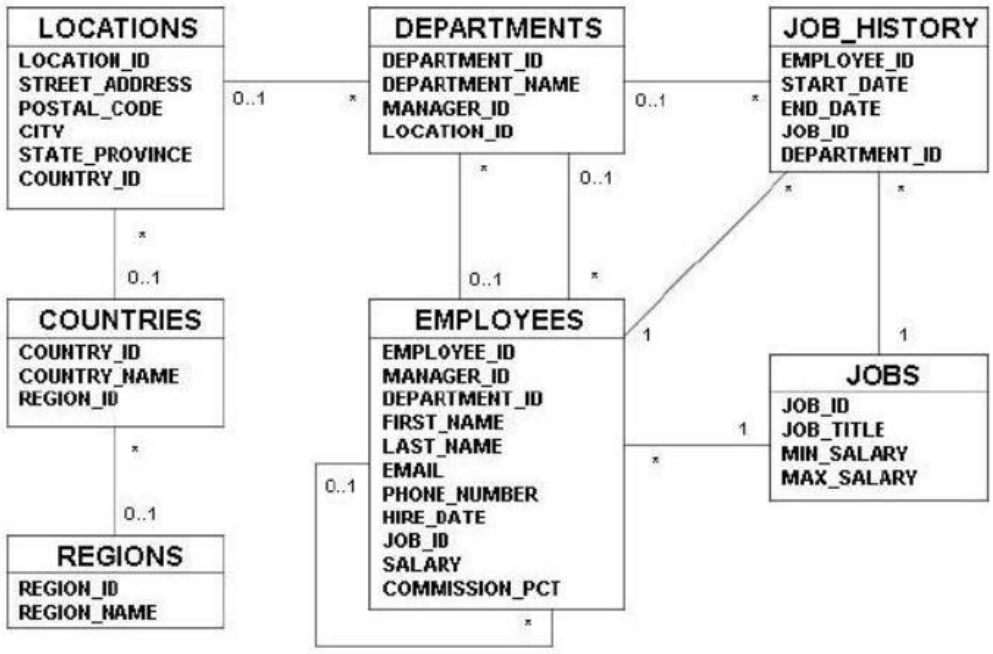
TD INFO0505

Licence 3 INFORMATIQUE UNIVERSITE DE REIMS

On utilise le schéma HR défini par :



Créer les requêtes suivantes :

1. Liste des employés dont le salaire est supérieur à tous ceux des employés du département 60.
2. Créer une table EMP_2 qui contiendra le prénom, le nom et l'email des employées obtenue et peuplée avec la table EMPLOYEES.
   Des employés sont ajoutés et des emails sont modifiés dans la table EMPLOYEES. Créer une mise à jour de la table EMP_2 avec un MERGE selon la présence ou non d'un employé dans EMP_2 et/ou la modification de l'email.
3. Nom des employés et leur nombre d'année de service. Si les employés ont plus de 15 années de service, plus de 10 année de service et plus de 5 années de service indiquer en plus respectivement 'Plus de x années de service' avec x =5, 10 ou 15 selon le cas.
   On utilisera un CASE et la fonction TO_YMINTERVAL qui convertit une chaine de caractère à un intervalle de type YEAR TO MONTH.

https://docs.oracle.com/cd/B28359_01/server.111/b28286/functions203.htm#SQLRF06144

TO_YMINTERVAL converts a character string of CHAR, VARCHAR2, NCHAR, or NVARCHAR2 datatype to an INTERVAL YEAR TO MONTH type.

TO_YMINTERVAL accepts argument in one of the two formats:

- SQL interval format compatible with the SQL standard (ISO/IEC 9075:2003)
- ISO duration format compatible with the ISO 8601:2004 standard

In the SQL format, *years* is an integer between 0 and 999999999, and *months* is an integer between 0 and 11. Additional blanks are allowed between format elements.

In the ISO format, years and months are integers between 0 and 999999999. Days, *hours*, *minutes*, *seconds*, and frac_secs are non-negative integers, and are ignored, if specified. No blanks are allowed in the value.
The following example calculates for each employee in the sample hr.employees table a date one year two months after the hire date:

SELECT hire_date, hire_date + TO_YMINTERVAL('01-02') "14 months" FROM employees;

4. En utilisant une expression régulière, compter les occurrences d'une sous-chaine dans une chaine saisies par l'utilisateur
5. Déterminer les noms et salaires des 3 salariés les mieux payés
6. Nom des colonnes, type de contraintes associées, condition de recherche et statut d'une table spécifiée par l'utilisateur. Pour cela, on utilisera le dictionnaire des données et les vues USER_CONSTRAINTS et USER_CONS_COLUMNS
   Doc Oracle :
   https://docs.oracle.com/cd/B13789_01/server.101/b10755/statviews_1037.htm#i1576022
   et
   https://docs.oracle.com/cd/B14117_01/server.101/b10755/statviews_1035.htm#i1575870

- **USER_CONSTRAINTS describes constraint definitions on tables in the current user's schema.**

Column	**Datatype**	**NULL**	**Description**
OWNER	VARCHAR2(30)	NOT NULL	Owner of the constraint definition
CONSTRAINT_NAME	VARCHAR2(30)	NOT NULL	Name of the constraint definition
CONSTRAINT_TYPE	VARCHAR2(1)		Type of constraint definition: • C (check constraint on a table) • P (primary key) • U (unique key) • R (referential integrity) • V (with check option, on a view) • O (with read only, on a view)
TABLE_NAME	VARCHAR2(30)	NOT NULL	Name associated with the table (or view) with constraint definition
SEARCH_CONDITION	LONG		Text of search condition for a check constraint
R_OWNER	VARCHAR2(30)		Owner of table referred to in a referential constraint

Column	Datatype	NULL	Description
R_CONSTRAINT_NAME	VARCHAR2(30)		Name of the unique constraint definition for referenced table
DELETE_RULE	VARCHAR2(9)		Delete rule for a referential constraint (CASCADE or NO ACTION)
STATUS	VARCHAR2(8)		Enforcement status of constraint (ENABLED or DISABLED)
DEFERRABLE	VARCHAR2(14)		Whether the constraint is deferrable
DEFERRED	VARCHAR2(9)		Whether the constraint was initially deferred
VALIDATED	VARCHAR2(13)		Whether all data obeys the constraint (VALIDATED or NOT VALIDATED)
GENERATED	VARCHAR2(14)		Whether the name of the constraint is user or system generated
BAD	VARCHAR2(3)		A YES value indicates that this constraint specifies a century in an ambiguous manner. To avoid errors resulting from this ambiguity, rewrite the constraint using the TO_DATE function with a four-digit year. **See Also:** the TO_DATE function in *Oracle Database SQL Reference* and *Oracle Database Application Developer's Guide - Fundamentals*
RELY	VARCHAR2(4)		Whether an enabled constraint is enforced or unenforced. **See Also:** the *constraints* in *Oracle Database SQL Reference*
LAST_CHANGE	DATE		When the constraint was last enabled or disabled
INDEX_OWNER	VARCHAR2(30)		Name of the user owning the index
INDEX_NAME	VARCHAR2(30)		Name of the index
INVALID	VARCHAR2(7)		Whether the constraint is invalid
VIEW_ONLY	VARCHAR2(14)		Whether the constraint depends on a view

- **USER_CONS_COLUMNS describes columns that are owned by the current user and that are specified in constraints.**

Column	Datatype	NULL	Description
OWNER	VARCHAR2(30)	NOT NULL	Owner of the constraint definition
CONSTRAINT_NAME	VARCHAR2(30)	NOT NULL	Name of the constraint definition
TABLE_NAME	VARCHAR2(30)	NOT NULL	Name of the table with constraint definition
COLUMN_NAME	VARCHAR2(4000)		Name of the column or attribute of the object type column specified in the constraint definition
			Note: If you create a constraint on a user-defined REF column, the system creates the constraint on the attributes that make up the REF column. Therefore, the column names displayed in this view are the attribute names, with the REF column name as a prefix, in the following form: "REF_name"."attribute"
POSITION	NUMBER		Original position of column or attribute in the definition of the object