









## Oppgave 2:

i)

Chromosome, Gene, exon, isoform

iii)

Chromosome (#chromosome\_id, chromosome\_name)

Gene (#gene\_id, name, chromosome\_loc, start\_coord, stop\_coord, \*chromosome\_id)

Exon (#exon\_id, start\_coord, stop\_coord, \*gene\_id)

Isoform (#isoform\_id, isoform\_name, \*gene\_id)

## Oppgave 3:

i)

Gene, Synonym, Reference

iii)

Gene (#gene\_id, Symbol, Official\_name, Start\_coordinate, End\_coordinate, chromosome\_name, chromosome\_length)

Synonym(#synonym\_id, name, \*gene\_id)

Reference (#Reference\_id, authors, title, journal, year\_published, \*gene\_id)

iv)

Gene (#gene\_id, Symbol, Official\_name, Start\_coordinate, End\_coordinate)

Chromosome (#Chromosome\_name, length, \*gene\_id)

Reference (#reference\_id, title, \*gene\_id)

Journal (#journal\_id, year\_published, \*reference\_id)

Author (#author\_id, name, \*reference\_id)

Synonym (#synonym\_id, name, \*gene\_id)

## Oppgave 5:

i) It lacks primary key.

If a table don't have a primary key then there can be duplicates in the database.

ii)

maximum\_weight is functionally dependant on model

iii) Registration\_number is a candidate key

iv)

Container\_type (#Type\_id, Type\_name)

Container\_max\_weight (#Max\_weight, type\_id\*)

Container\_quantity (#Cubic\_quantity, type\_id\*)

Container\_nightly\_rate (#Nightly\_rate, type\_id\*)

Container (#Container\_number, Type\_id\*)

Customer (#Telephone\_number, Address)

Assignment (#Assignment\_number, Telephone\_number\*, Container\_number\*)

Time\_span (#Start\_date, #End\_date, Assignment\_number\*)

Truck (#Registration\_number, Assignment\_number\*)

Truck\_weight (#maximum\_weight, Registration\_number\*)

Truck\_model (#model, Registration\_number\*)

Truck\_registration\_year (#Registration\_year, Registration\_number\*)