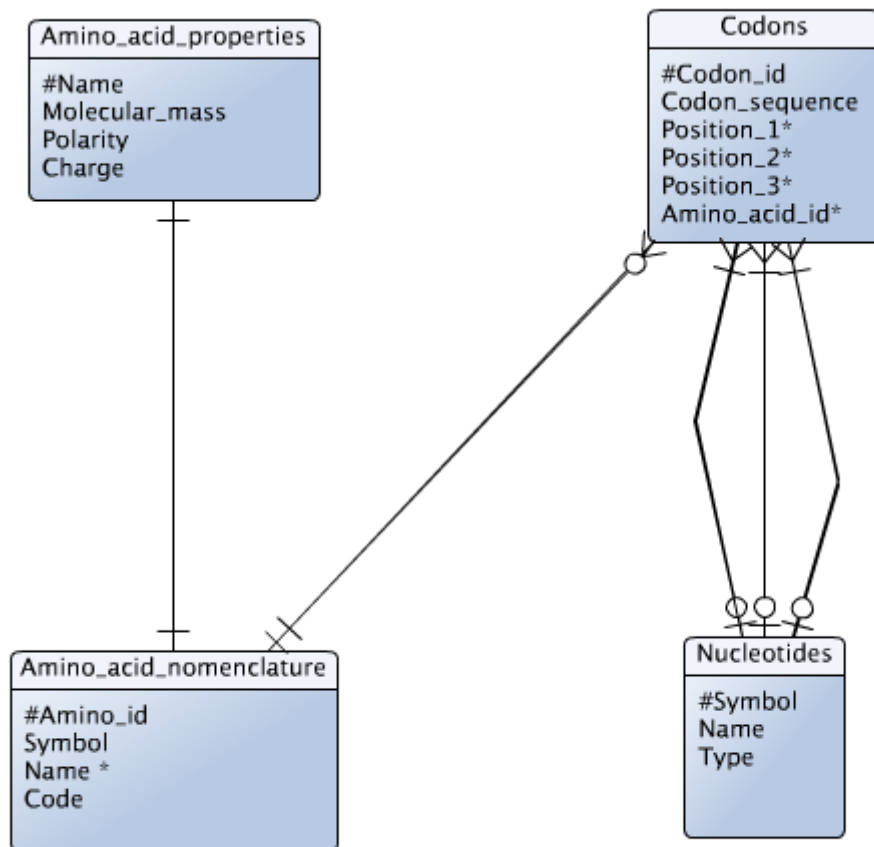


## INF115 Obligatorisk Oppgave 2

### Oppgave 1)



### Oppgave 2

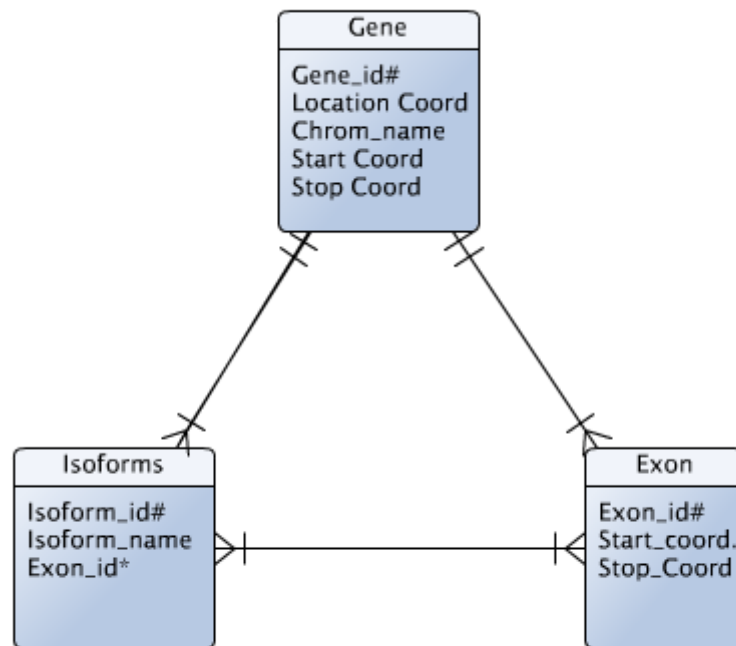
i)

Genes(#Gene\_id, Name, Location, Chromosome\_name, Start\_coord, Stop\_coord)

Exon(#Exon\_id, Start\_coord, Stop\_coord)

Isoform(#Isoform\_id, Isoform\_name)

ii)



iii)

Genes(#Gene\_id, Name, Location, Chromosome\_name, Start\_coord, Stop\_coord)

Exon(#Exon\_id, Start\_coord, Stop\_coord)

Isoform(#Isoform\_id, Isoform\_name)

Isoform\_exon(#Isoform\_id, #Exon\_id)

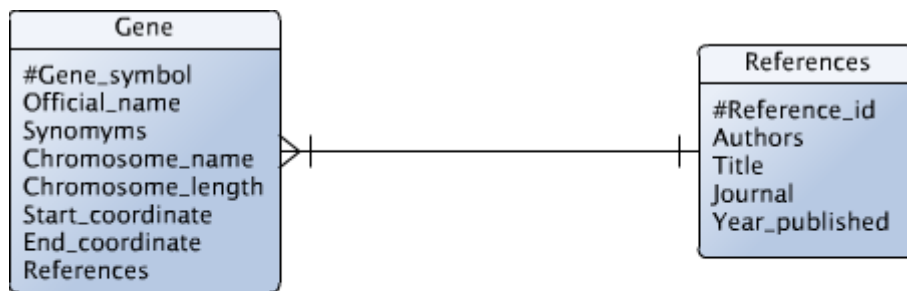
### Oppgave 3

i)

Gene(#Gene\_symbol, Official\_name, Synonyms, Chromosome\_name, Chromosome\_length, Start\_coordinate, End\_coordinate, References)

Reference(#Reference\_id, Authors, Title, Journal, Year\_published)

ii)



iii)

Gene(#Gene\_symbol, Official\_name, Chromosome\_name, Chromosome\_length, Start\_coordinate, End\_coordinate, Reference)

Reference(#Reference\_id, Authors, Title, Journal, Year\_published)

Synonyms(#Gene\_symbol, Names)

iv)

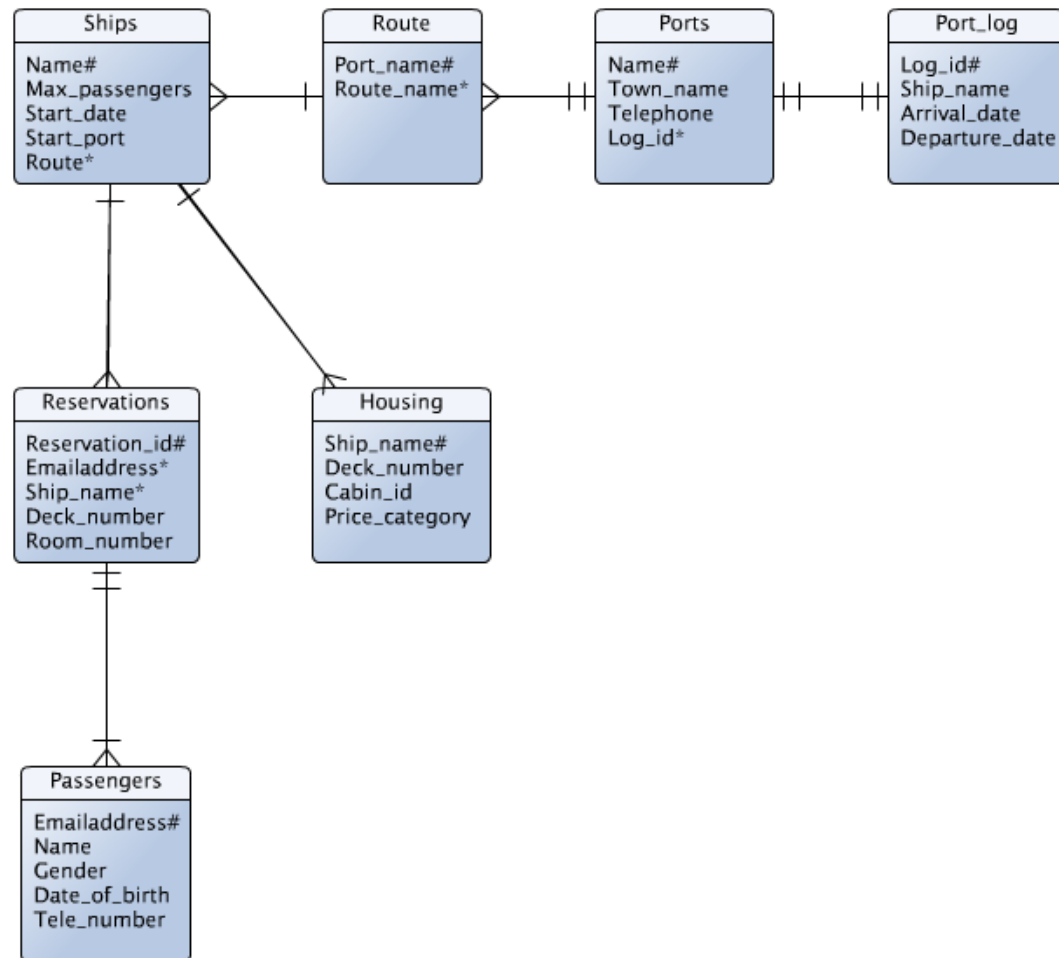
Gene(#Gene\_symbol, Official\_name, Chromosome\_name\*, References\*)

Reference(#Reference\_id, Authors, Title, Journal, Year\_published)

Synonyms(#Gene\_symbol, Names)

Chromosome(#Chromosome\_name, Start\_coordinate, End\_coordinate, Chromosome\_length)

#### Oppgave 4



#### Oppgave 5

i)

- Truck table isn't given a primary key
- Truck model should be in its own table with the max\_weight attribute
- A truck can only have one assignment

ii)

Registration\_number → Registration\_year, Assignment\_number

Model → Maximum Weight

iii)

Registration\_number

iv)

Container\_type (#Type\_id, Type\_name, Max\_weight, Cubic\_quantity, Nightly\_rate)

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

Customer (#Telephone\_number, Address)

Assignment (#Assignment\_number, Telephone\_number\*, Container\_number\*, Start\_date,  
End\_date)

Truck (#Registration\_number, Registration\_year, Model\*, Maximum\_weight, Assignment\_number\*)

Model\_Weight(#Model, Maximum\_weight)