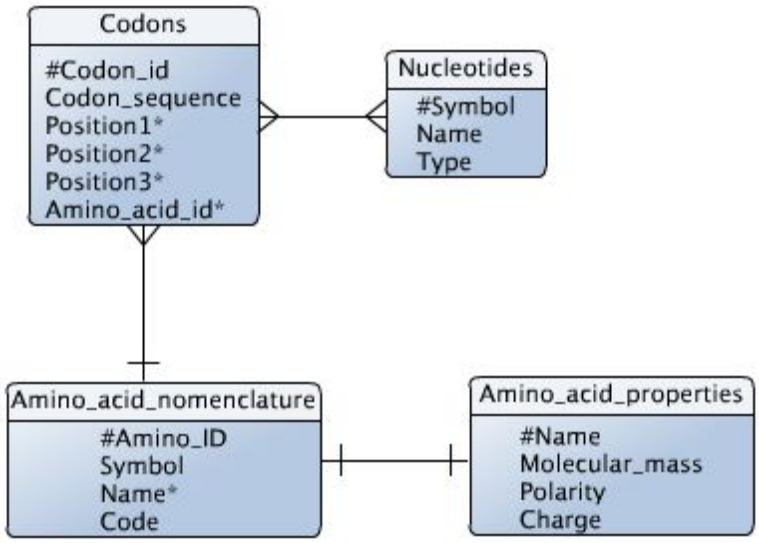
INF115
Compulsory exercise 2
Jbj011
John Even Bjørnevik

1)

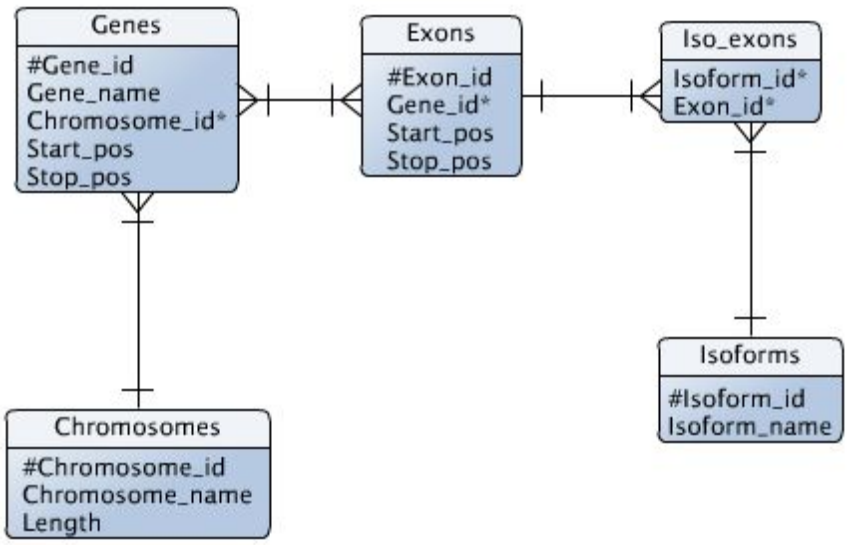


2)

i)

Genes, exons, isoforms, chromosomes

ii)



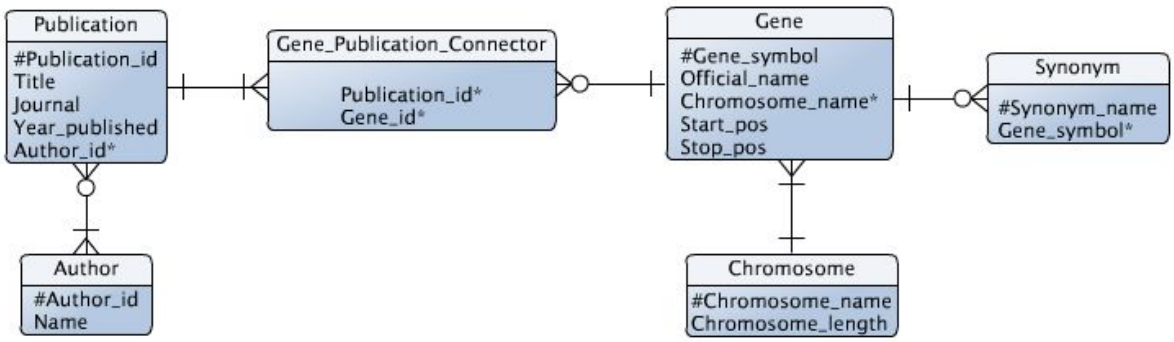
iii)

Genes(#Gene_id, Gene_name, Chromosome_id*, Start_pos, Stop_pos)
Exons(#Exon_id, Gene_id*, Start_pos, Stop_pos)
Isoforms(#Isoform_id, Isoform_name)
Iso_exons(Isoform_id*, Exon_id*)
Chromosomes(#Chromosome_id, Chromosome_name, length)

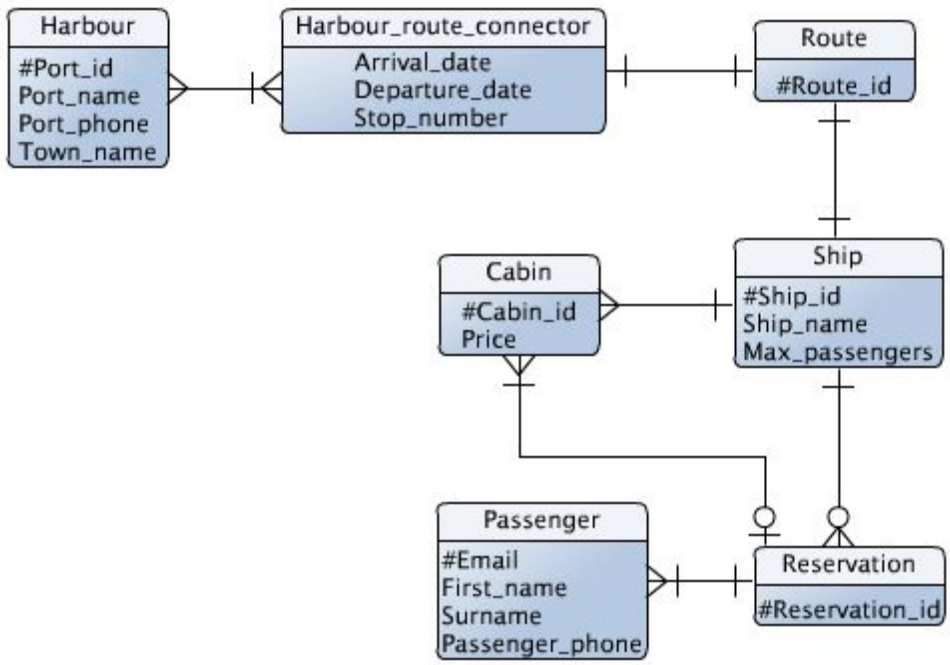
3)
Exercise 3.iii, and 3.iv had to be skipped due to time constraints caused by poorly planned schedule.

i)
Genes, Chromosome, Synonyms, Publications

ii)



4)



5)

Exercise 5.IV had to be skipped because of time constraints.

i)

We know the maximum weight of the vehicle but not the actual weight of the vehicle therefore this information can be quite vague. Also I would handle the registration number as the Primary key as I see there is no primary key marked.

ii)

Maximum_weight, Model, and Registration year are all functionally dependent on Registration_number

iii)

Registration_number is the only candidate key in the table, as all other values in the table are not guaranteed to be unique to any one entry. Therefore Registration_number is also the Primary key of the table.