Compulsory assignment 2, INF115

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Task 1:

Nucleotides

#Symbol
Name
Type

Codons

#Codon_id
Codon_sequence
Position1*
Position2*
Position3*
Amino_acid_id*

Amino_acid_properties

#Name
Molecular mass
Polarity
Charge

Amino_acid_nomenclature

#Amino_id
Symbol
Name*
Code

Task 2:

i)

Isoform

Isoform_id
Isoform_name

Exon

Exon_id
Start
Stop

Gene

Gene_id
Name
Chromosome_name
Cromosome_start
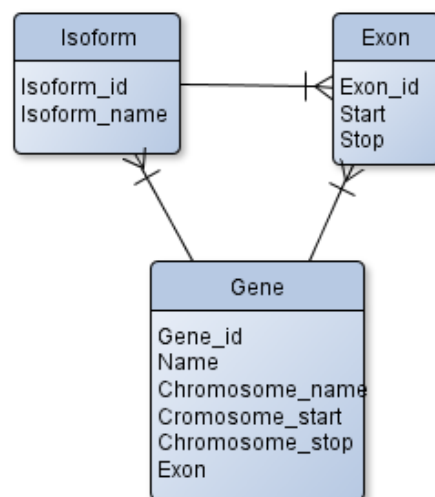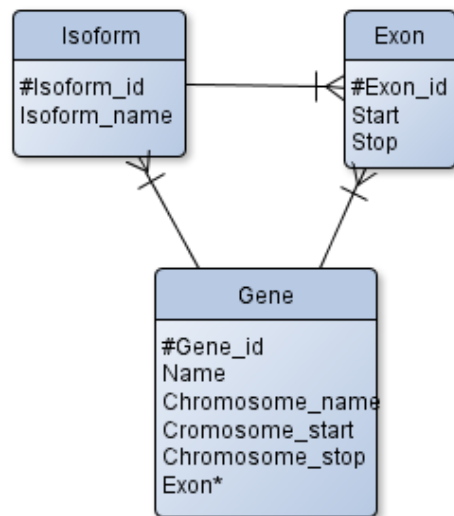Chromosome_stop
Exon
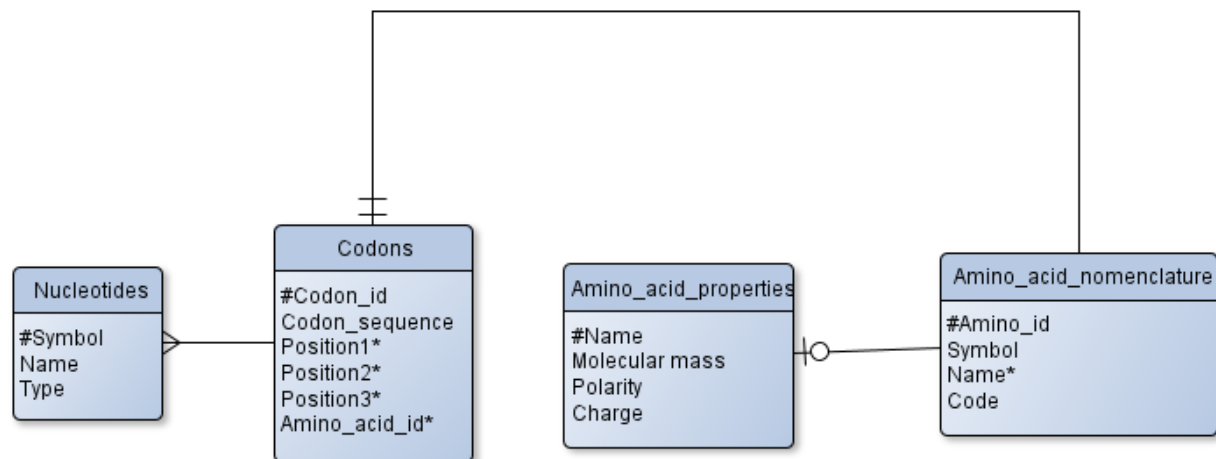
ii)

iii)

Gene(#Gene_id, Name, Chromosome_name, Chromosome_start, Chromosome_stop, Exon*)
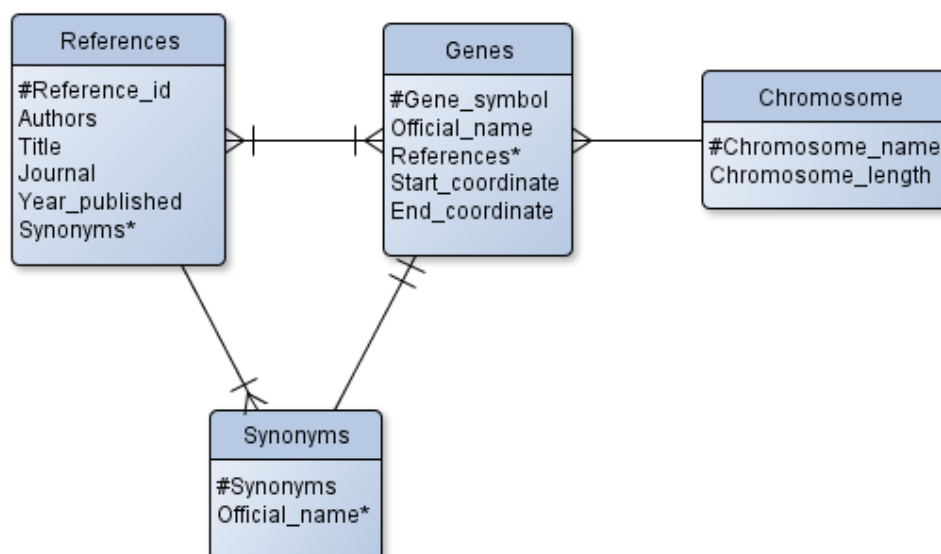
Exon(#Exon_id, Start, Stop)

Isoform(#Isoform_id, Isoform_name, Exon*)

3)

i)

Genes, Chromosome, References

ii)

iii)

Genes(#Gene_symbol, Official_name, References*, Start_coordinate, End_coordinate)

References(#Reference_id, Authors, Title, Journal, Year_published, Synonyms*)

Synonyms(#Synonyms, Official_name*)
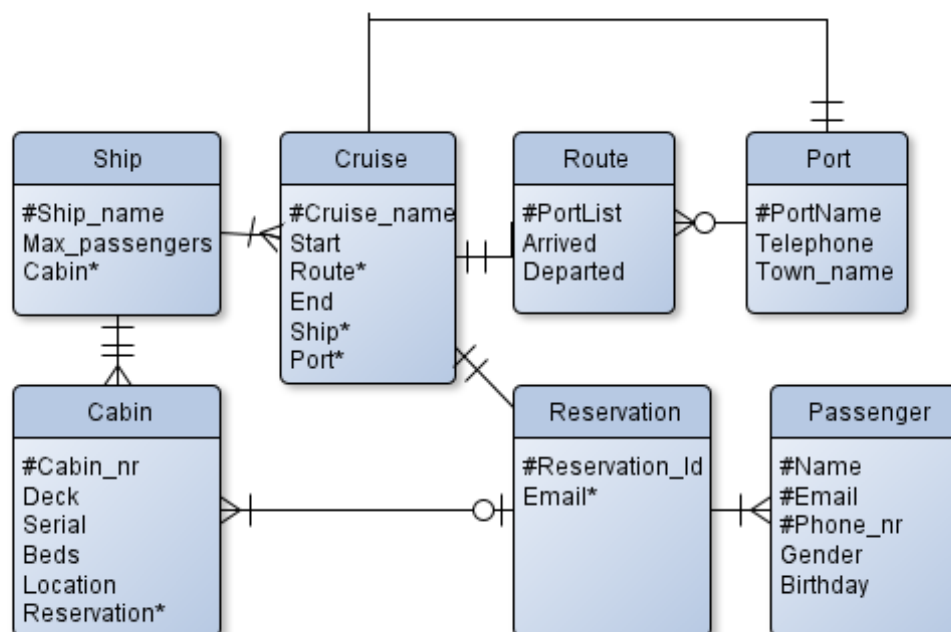
Chromosome(#Chromosome_name, Chromosome_length)

iv)

Genes(#Gene_symbol, Official_name, References*, Start_coordinate, End_coordinate, Synonyms)

References(#Reference_id, Authors, Title, Journal, Year_published, Synonyms)

Chromosome(#Chromosome_name, Chromosome_length)

4)

5)

i) It doesn't have a primary key

ii) Maximum weight is a dependency of model. (The opposite is not necessarily true.)

iii) Registration number, model

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(Maximum_weight, Assignment_number*)

Model(#Registration_number, Registration_year, Model)