UNIVERSITY OF TORONTO

Assignment: 4
Course: CSCC43
Deadline: Oct 4th, 11:30pm
Submission: via blackboard

1- The following tables are not a relation. What would you change in them to become a relation?

A)

PatientID	Surname	TestType
1002750	Doe	NBSR
1002846	Doe	NGENZ, NCSRY
1002030	Smith	BTWGS, NBSR, NCSRY
1002556	Smith	NGENZ, NBSR

B)

Name	Surname	TestType
Jane	Doe	NBSR
Jane	Doe	NBSR
John	Smith	NGENZ
Joe	Smith	NCSRY

C)

ID	ID	Frequency
1002750	NBSR	2
1002846	NCSRY	3
1002030	BTWGS	1
1002556	NBSR	2

D)

ID	Test	MoreRepeat
1002750	(NBSR, 2)	T
1002846	(NCSRY, 3)	F
1002030	(BTWGS,1)	F
1002556	(NBSR, 2)	F

2- Which attribute(s) you would choose as (a) primary key(s) for the following relations?

A) AppleProduct (SerialNo, ProductVersion)
B) Movie (Name, ProductionDate, Director, Category, CastsNo)
C) Address(BuildingNo, StreetNo, City, Province)

3- What would you change to preserve the integrity of the following tables? What type of integrity constraint is lacking here?

A)

PersonnellD	Name	GraduationCGPA
1002750	John	A+
1002846	Jane	87
1002030	Liz	72
1002556	Sue	B

B)

PersonnellD	Name	Salary
1002750	John	80000
1002846	Jane	90000
	Liz	100000
1002556	Sue	110000

C) The following two tables should be considered together.

StudentID	Name	GPA
1002750	Jane Doe	3.4
1002846	John Doe	2.7
1002030	John Smith	3.1
1002556	Jane Smith	2.6

CourseID	StudentID	Mark
CSCC43	1002750	90
CSCC44	1002750	80
CSCC44	1002030	95
CSCC43	1003010	85