

### Programming Exercise (Week 7)

*(this is not an assignment)*

**Question 1.** This is the content of an XML file q1-error.xml

```
<?xml version="1.0" encoding="UTF-8"?>
  <student sn=3719301>
    <firstName>John</firstName>
    <lastName>Smith</lastName>
    <email>jsmith@gmail.com</email>
  </student>

  <student sn=6382520>
    <firstName>Mary</firstName>
    <lastName>Jane</lastName>
    <email>mjane@gmail.com</email>
  </student>
```

The above XML file contains several errors.

Your task is to identify these errors and correct them.

Save your correct XML code into a new file called q1-correct.xml.

**Question 2.** Have a look at the following XML sample code. Your task is to create an XML file called q2.xml and write XML code to include 5 staff records.

```
<?xml version="1.0" ?>
<dailyUpdate campus="Woolloomooloo" date="24/02/2016">
  <staff operation="update">
    <staffNumber>0154728</staffNumber>
    <firstName>John</firstName>
    <lastName>Smith</lastName>
  </staff>

  <staff operation="add">
    <staffNumber>5287523</staffNumber>
    <firstName>Mary</firstName>
    <lastName>Jane</lastName>
  </staff>
</dailyUpdate>
```

**Question 3.** Write an XML document called q3.xml that represents the following student record:

SMITH, John - student id 1231234			
Subject	Credit Point	Mark	Grade
MATH101	4	85	A
ECON111	5	70	B
CS100	5	80	A
LAW121	6	75	B

**Question 4.** Copy the code from q3.xml to q4.xml.

In q4.xml, write the corresponding internal DTD.

**END OF THE PROGRAMMING EXERCISE**