



Question 1 (15 marks)

Assume **Student** is a reference to a Mongoose model that has the following field:

```
teachers: [{
type: mongoose.Schema.Types.ObjectId,
ref: 'Teacher'
```

Assume you have the following API endpoint:

```
app.put('/students/:sId/teachers/:tId',addTeacher);
```

Where sld is the student's ID, tld is the teacher's ID, and addTeacher is the callback function)

Develop the function addTeacher that pushes the teacher's id tld into the array 'teachers' for a student with ID equals to sld. The function must respond in JSON format with the error of an error occurs, "Done" otherwise.



Question 2 (12 marks)

The following piece of code is designed to add a new document of type Teacher to a collection.

It is supposed to accept the following request, but the code didn't work:

http://localhost:8080/teachers?fullName=Time&school=Primary1

Find all the possible problems in the code above and suggest solutions.

Notes: Assume all the variables (app, Teacher, mongoose) are well implemented and/or referenced.



Question 3 (5+2=7 marks)

- a) In which scenario would you use PUT http request instead of POST?
- b) RESTFul API is a stateless architecture. Elaborate this statement.