**INSTRUCTIONS**

**Please read the instructions carefully before doing the questions.**

* You are **NOT allowed** to use any device to share data with others.
* You must use **Visual Studio Code, MongoDBCompass, MongoDB V6 or later, Postman** for your development tools.

**IMPORTANT – before you start doing your solution, MUST do the following steps:**

1. *Please check before you submit your work, no syntax error(s) in the submitted PE.*
2. *The data for all collections must be gotten from courses.json, sections.json and members.json file.*
3. ***If there are syntax errors or compilation errors in your PE program, you will not pass the PE requirements, the mark will be 0.***
4. Create a new project in Visual Studio Code named **PE\_SDN301m\_TrialTest\_StudentCodeDB**.
5. You must create MongoDB database with the name **PE\_SDN301m\_ TrialTest\_StudentCodeDB.**

**REFERENCES *(this session just for reference, student can use other approach to do the practical exam)***

***Note***

Install node packages using npm command:

npx express-generator studentNumber

npm install mongoose

npm install ejs

npm install passport passport-local connect-flash express-session

npm install passport-local-mongoose

npm i bcrypt

- Link Bulma CSS and Boostrap CSS:

<https://cdn.jsdelivr.net/npm/bulma@0.9.4/css/bulma.min.css>

<https://getbootstrap.com/docs/5.3/getting-started/introduction/>

- Data for members collection:

{

"username": "admin",

"password": "$2b$10$b7J7UgQDdVjqMbvuDM.WTOjN7bYCdUo5xFitdftMrkWHzO6O85clO"

}

//password: 123456789

- Hash password:

bcrypt.hash(newUser.password, 10, function(err, hash) {

if (err) throw err;

newUser.password = hash;

newUser.save()

.then(user =>{

res.redirect('/users/login');

})

.catch(next);

});