

### Assignment 3

Q1. **The Student Table** (creating MySQL database)

Submit your SQL command for the following questions.

- (a) Create a new MySQL database and name the database as **assignment\_3**.
- (b) Create a new table named **Student** with the following fields:

Key	Index	Null	Unique	Column Name	Data Type	Size
√	√		√	StudentID	CHAR	9
				StudentName	VARCHAR	30
				Gender	CHAR	1
				Program	CHAR	1

**NOTE:**

- **Gender** field holds F (Female) or M (Male).
- **Program** field holds J (Software Engineering), R (Networking) or B (Bioinformatics).

- (c) Insert records below into the **Student** table.

StudentID	Name	Gender	Program
A21EC0001	Ahmad	M	J
A21EC0002	Siti	F	B
A21EC0003	Muhammad	M	R
A21EC0004	Nurul	F	B
A21EC0005	Farid	M	R
A21EC0006	Aishah	F	J

Q2. **List Student – Version 1** (selecting records)

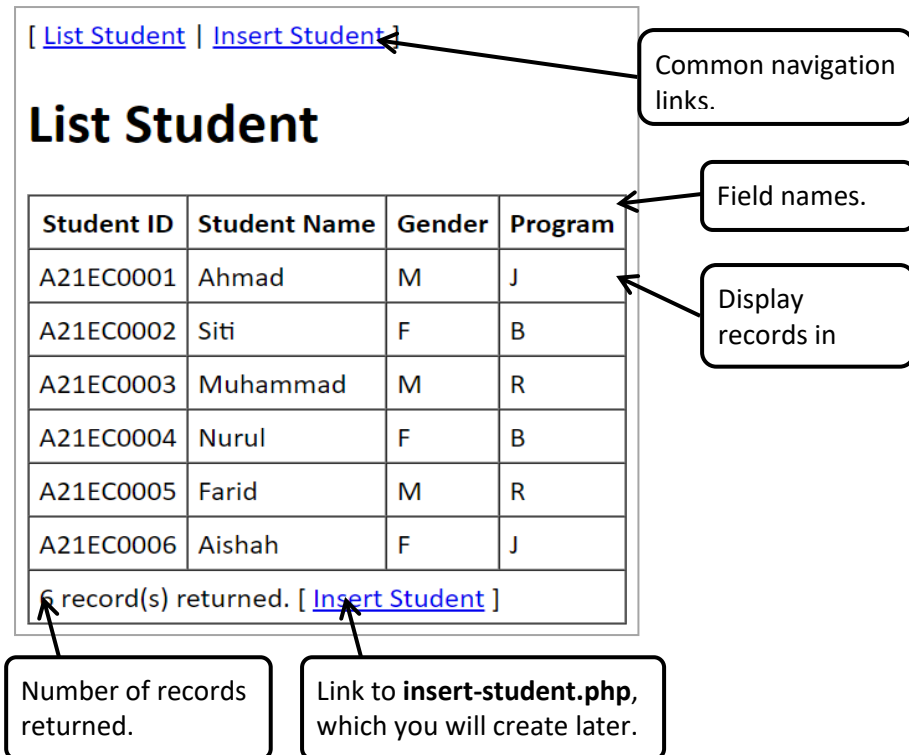


Figure 1: **list-student.php** (version 1)

With reference to **Figure 1**, create the PHP page **list-student.php**. Select and display all **Student** records in an HTML table. In addition, display the number of records returned at the last row.

Q3. **List Student – Version 2** (selecting records)

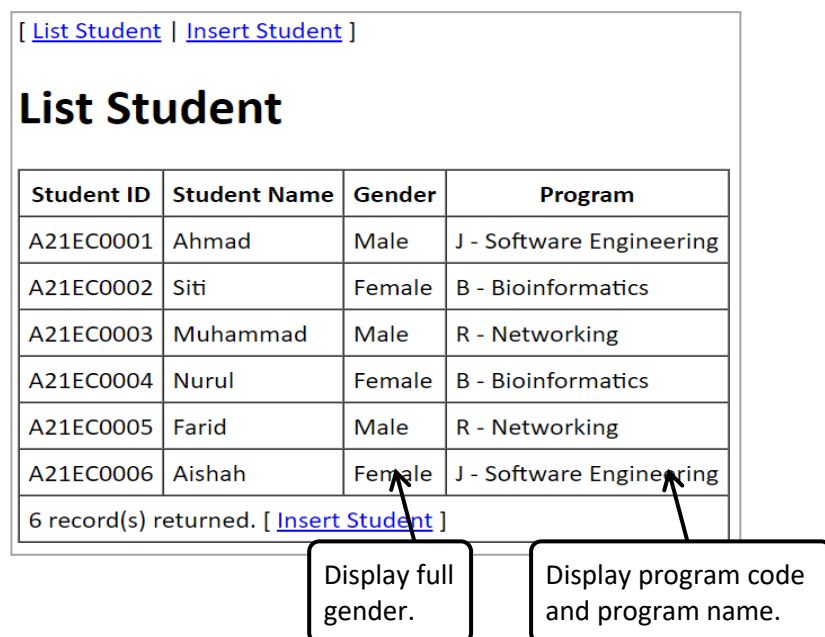


Figure 2: **list-student.php** (version 2)

Modify **list-student.php** so that **Gender** and **Program** field will be displayed as full descriptions rather than code (refer to **Figure 2**).

Q4. **Insert Student** (inserting records)

The figure shows a web form titled "Insert Student" with a navigation bar containing links for "[ List Student ]" and "[ Insert Student ]". The form contains the following fields: "Student ID" with the value "A21EC0099", "Student Name" with the value "Naruka", "Gender" with radio buttons for "Female" (selected) and "Male", and "Program" with a dropdown menu showing "Software Engineering". At the bottom are "Insert" and "Cancel" buttons. Two callout boxes provide instructions: one points to the "Insert" button with the text "Insert the record to the database.", and the other points to the "Cancel" button with the text "Navigate back to list-student.php."

Figure 3: insert-student.php

The figure illustrates two states of the "Insert Student" form. The top state, under the heading "IF INPUT ERROR DETECTED!", shows a red error box with the following messages: "Student ID given already exist. Try another.", "Please select a Gender.", and "Please select a Program.". The form fields below show "Student ID" as "A21EC0001", "Student Name" as "Naruka", "Gender" with unselected radio buttons, and "Program" as "-- Select One --". Callout boxes indicate "Display error messages." pointing to the error box, and "Check for duplicated Student ID." pointing to the "Student ID" field. The bottom state, under the heading "IF EVERYTHING OK!", shows a blue success message: "Student Naruka has been inserted. [ Back to list ]". Below this, the form fields are empty, and callout boxes indicate "Display message to indicate successful" pointing to the success message and "Clear all fields." pointing to the empty input fields.

Figure 4: insert-student.php

Create the form **insert-student.php** (as shown at **Figure 3**) so that users can insert new records to the **Student** table. You should perform the necessary input

validations (including checking for duplicated Student ID) before the insertion taken place. Display meaningful message in case of input error as well as successful insertion (refer to **Figure 4**).