University of Technology
الجامعة التكنولوجية

Computer Science Department
قسم علوم الحاسوب

Dynamic Web Programming lab

All branches

4th stage

Lectures: Dalya T., Zena M.

cs.uotechnology.edu.iq

Republic of Iraq
University of Technology
Department of Computer Science

Web Programming lab

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Lectures:

M.Sc. Dalya T. and M.Sc. Zena M.

Introduction:

https://cs.uotechnology.edu.iq/

Lectures:

Introduction to defining the theoretical aspect

- Learn how to create an HTML file.
- Identify the nature of language tags.

Defining the importance of the practical aspect to the student

- Recognizing HTML, head, title, and body tags
- Learn how to write text on a page.
- Learn how to change the background color of a document or make it as an image.

Get the following output:

An introduction to defining the theoretical aspect related to the first program
Learn about the following concepts

- Learn about instructions related to web page formatting, writing formatting and its characteristics, and dealing with colors.
- Page properties.
- Font: size, color, type, etc
- Numbering: ordered, unordered, and defined.

Defining the importance of the student's practical aspect to the program for example:

HTML

Heper text markup language is used for web programming.

5. SW

6. IS

- **One**
- **Two**

7. AI

8. NW

Learn about the following concepts

- Add the image to the web page.
- Numbers of hyperlinks.
- Making an image map.

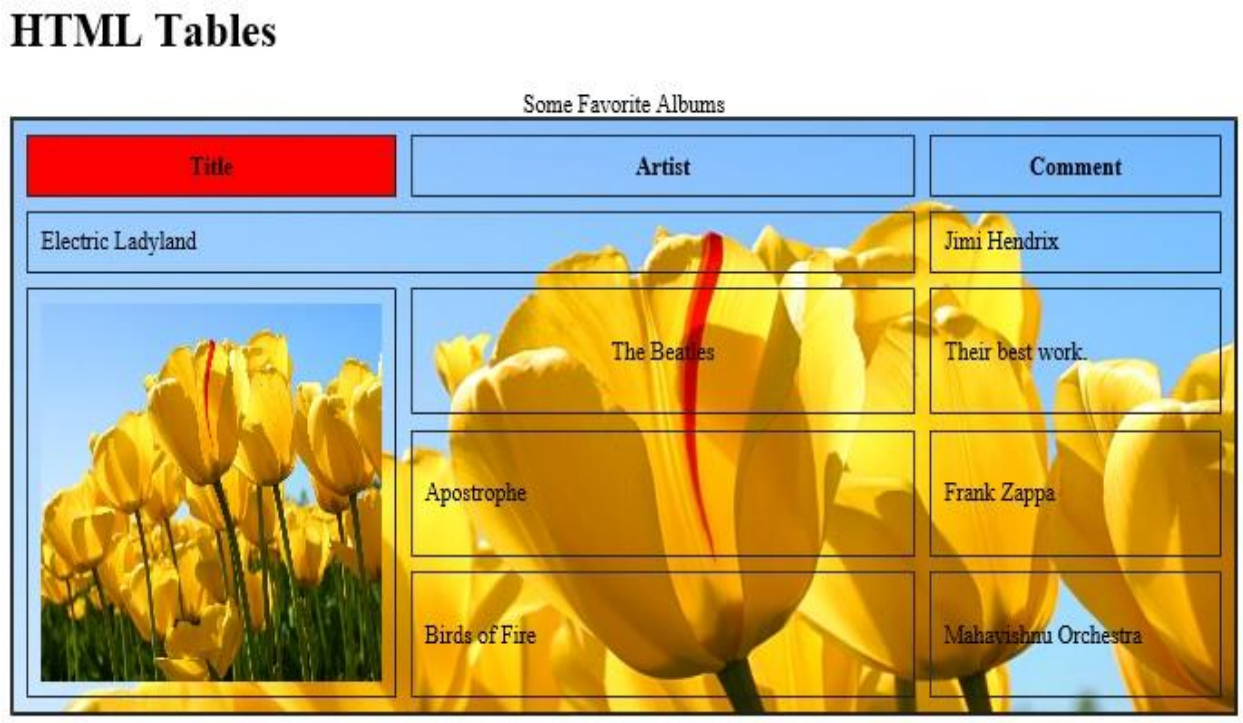
Write a program whose execution results are as follows:

- Insert the following image into the web page. The image is 400x400 in size.
- When you click on the areas shaded by a circle and a square, you will be taken to another web page. When you click on the circle, you will be taken to a page called circle with circle written on it. While when you click on the square, you will be taken to a web page whose name and name is square.
- Add a 5 pixel frame to the image.
- When we point to the image, the phrase "This is an image" appears.

Learn about the following concepts

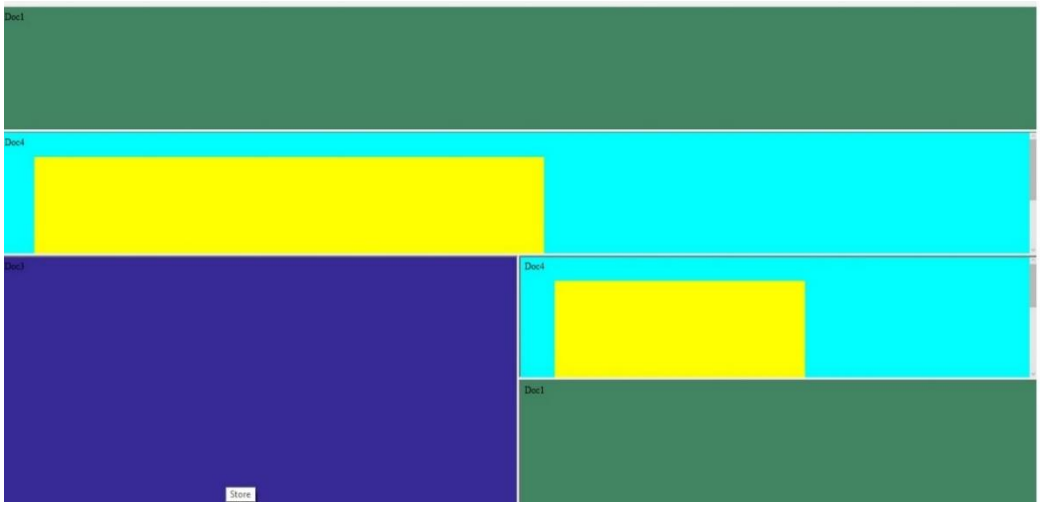
- Build the table.
- Set a title for the table.
- Building a table structure.
- Framing the table.
- Set a background color for one of the cells.
- Set a background color or image for each table.
- One of the table cells contains previous instructions: such as an image and a link.
- Merge a number of cells across rows or columns.

Write a program whose execution result is the following table:



- Learn about the concept of frames and how to display more than one document through the windows of a web page.
- Apply attributes: rows, columns, frames, borders between frames, frame colors, and frame spacing. In addition to the source of the displayed document, its width and height. And address the case of the browser being unable to display frames.

Create Html page with a frame set. This means that the page will be divided into a set of frames, and each frame will also be divided into many frames. A link, an images, and another html pages in that frame:

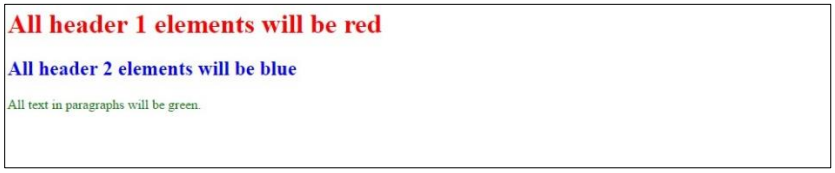


- Recognizing the concept of the form, which is similar to an electronic form, and is used to interact with the user and send information to the server.
- Identify the components of the form, which are:
  - Text box, password box, and large text box.
  - Choices.
  - Drop-down menus.
  - Sending information.
  - File Upload.
  - Additional components: such as visible and hidden buttons, and buttons that return the form components to the default numbers.

Create an Html page with all form elements.

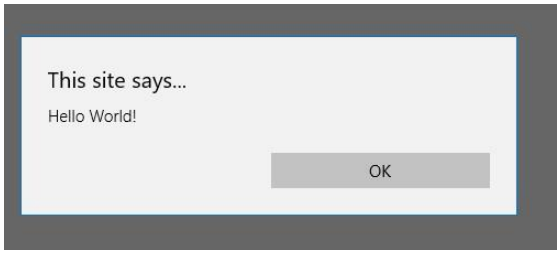
- Getting to know CSS.
- Know what CSS is.
- How to implement CSS internally.
- How to link external CSS.

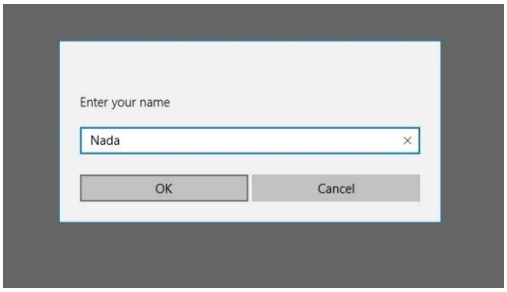
Apply Inner and outer CSS.



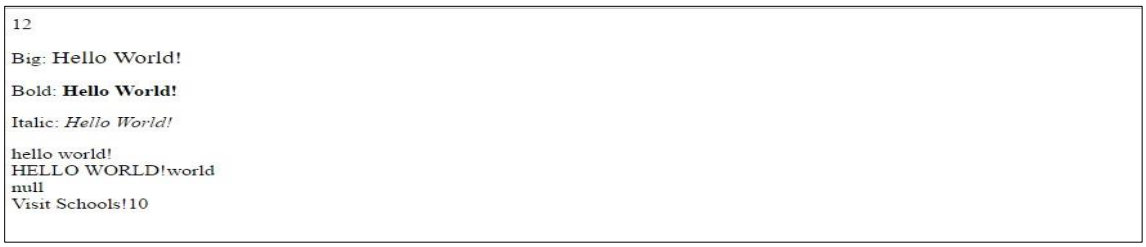
Learn about the basics of the **JavaScript** language.

- Know the conditions.
- Identifying the processes of substitution.
- Loop recognition (for example: printing numbers from 1-10 and each number on a line).
- Identify pop-up messages.





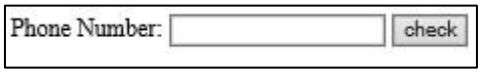
- Dealing with arrays.
- Application of various mathematical and textual functions.
- Defining arrays and printing the contents of an array.
- Applying mathematical functions: such as rounding and finding the largest and smallest value. Generate random values.
- Finding the length of a specific text.
- Converting text letters to small or uppercase letters.
- Functions to make the font bold, italic, and underlined.
- Matching text with another text.

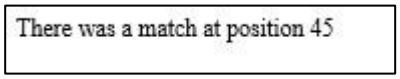


- Dealing with time, date, and functions. Dealing with texts and mathematical functions in JavaScript
- Apply time and date functions such as set, get, and other functions.
- Applying functions to deal with text
- Application of mathematical functions

Changing the contents of HTML elements

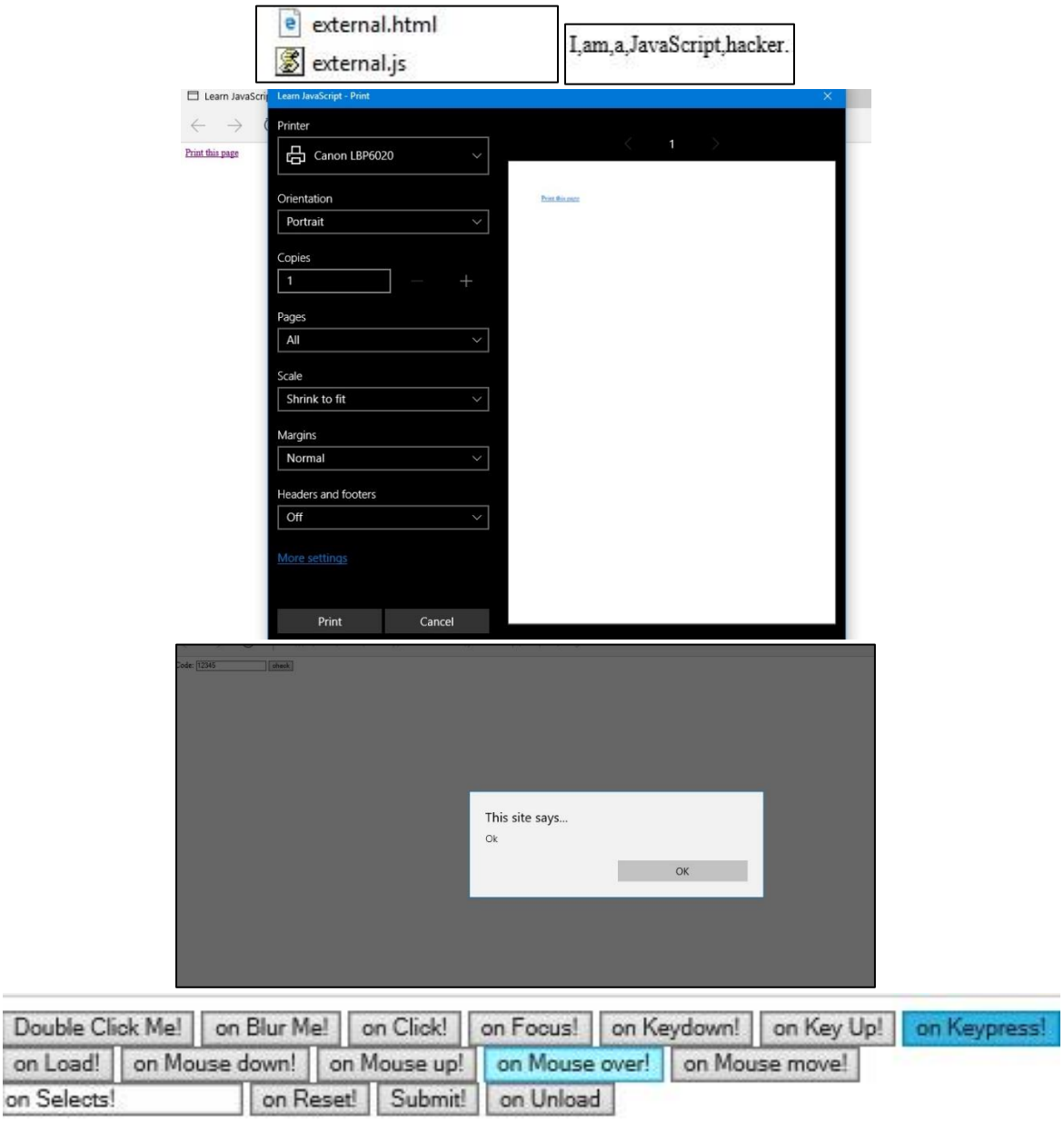
- Dealing with innerHTML
- Dealing with getElementByID
- Search function
- The function of verifying that an expression has been entered, either numeric or literal
- A function that returns a character with a specific sequence





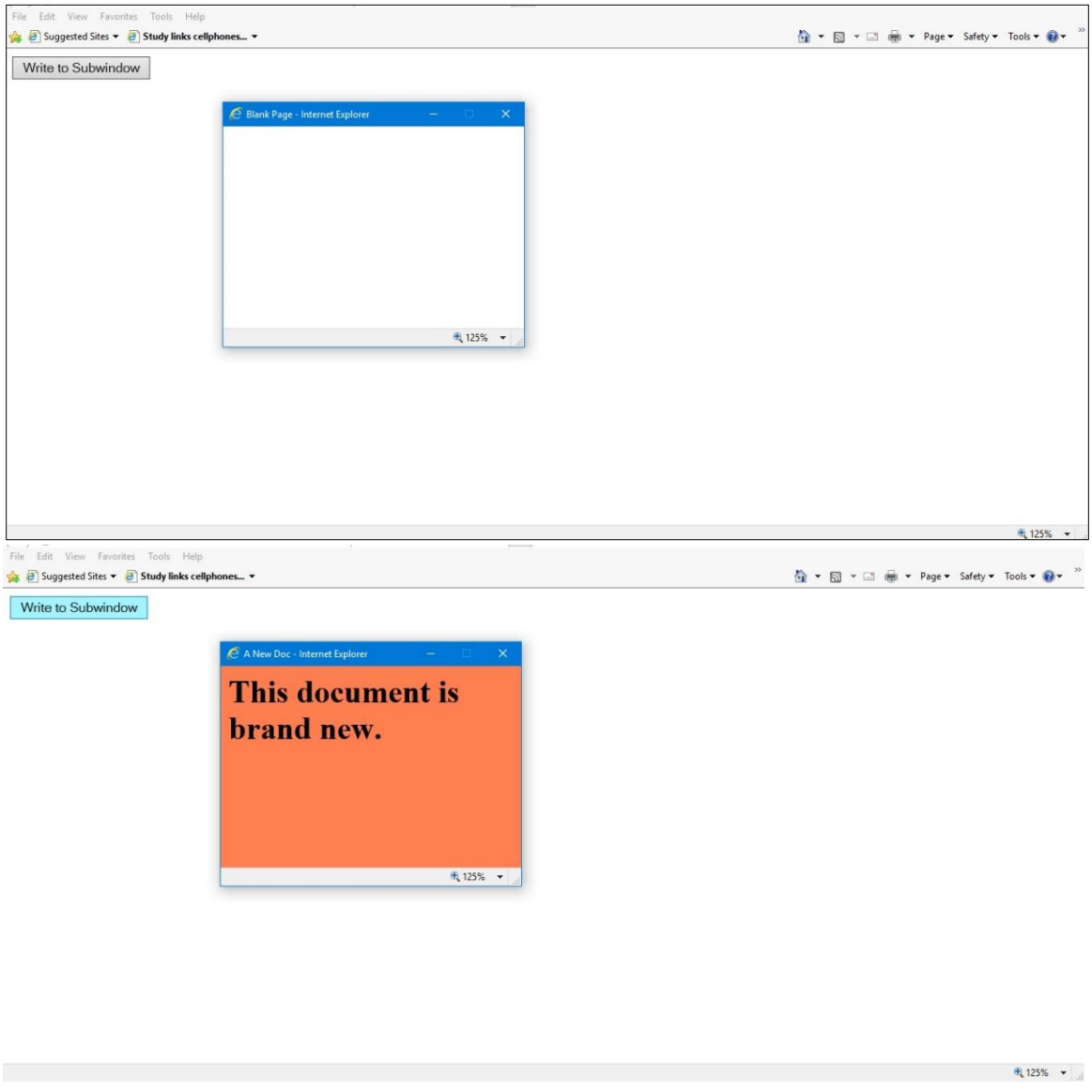
- Form validation
- Verify the entry to the form.
- Identifying events
- Linking the written JavaScript to an external file.
- The void(0) and reload statements and the show print box statement.
- All events application

Examples:



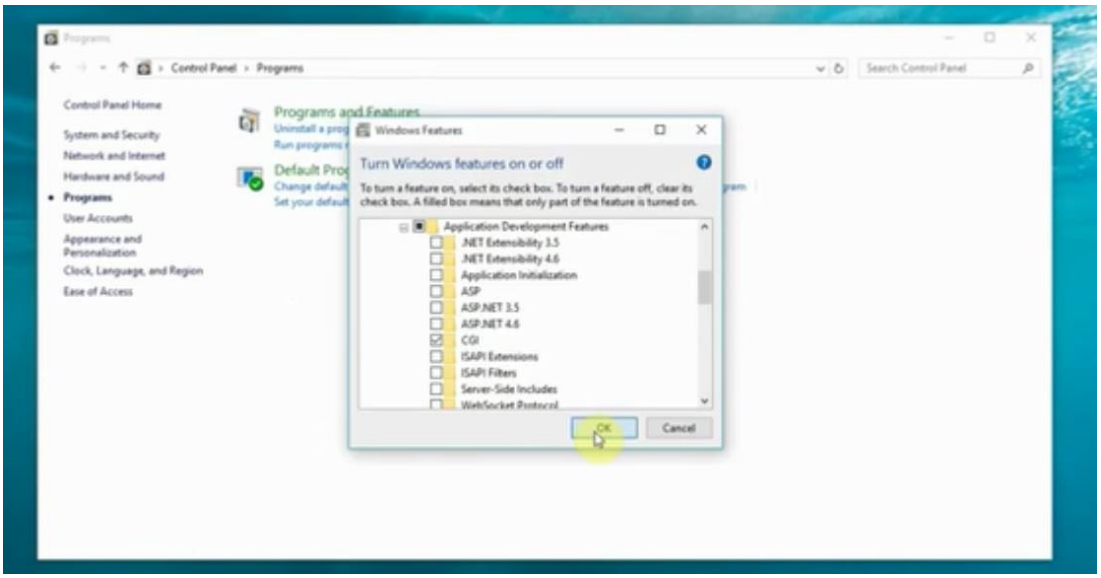
Handle in a new window

- Window example application which opens a new window, when the file is opened. Writing, that is, creating the special format for the new window, is done when a button in the first window is pressed.

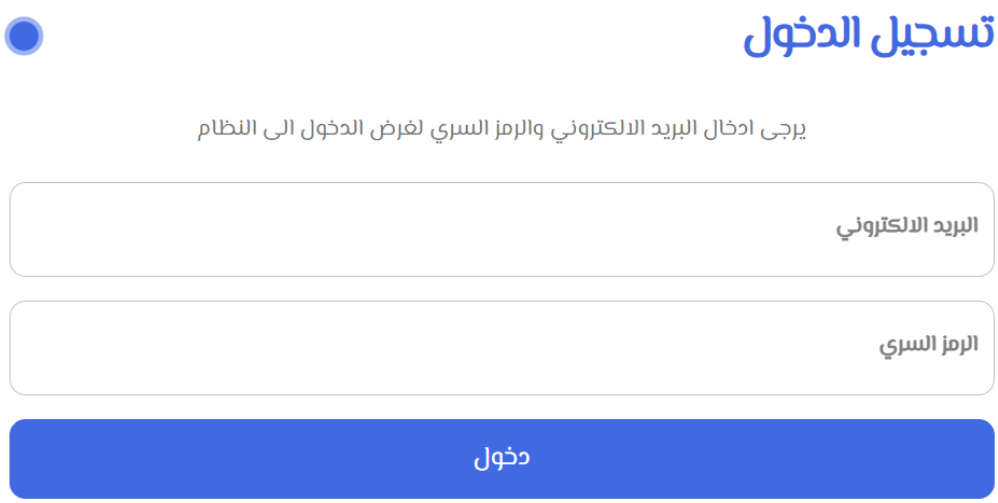


- Dealing with the ASP language
- Make the calculator client and server at the same time.
- Implementing ASP language primitives such as the Print and Loop syntax
- Applying the steps to install IIS in the laboratory for each student.
- Executing a print statement.
- The ASP handles when sending and obtaining data from the form

Installation steps for IIs:



- Create a form to enter the name and password, then you will receive the entry information and send it to the appropriate page if the information is correct, incorrect, or incomplete.
- You can authorize the user.



- Handling files (creating, writing, opening, reading).
- Connecting ASP to a database.
- File creation application
- Writing to a file.
- Close a file.
- Implementing the steps for linking to the ACCESS database
    - Create an ADO link
    - Open the connection to the database

- Create the ADO record set
- Open the record sets
- Extracting the required information
- Close the record set
- Close the connection.

- Create a table in the database and read its contents via a form built in an ASP page.
- Learn how to add items to the table.
- Learn how to delete items from the table.
- Learn how to update table values.
- Dealing with various mathematical and textual transactions.

Example table:

EMPNO	ENAME	SAL	MGR
7902	FORD	3000	7566
7369	SMITH	800	7902
7788	SCOTT	3000	7566
7876	ADAMS	1100	7788