DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LAB MANUAL FOR

SUBJECT: WEB TECHNOLOGY LAB

SUBJECT CODE: CS302

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| |  | | --- | | **PROGRAM NO: 1** **DATE:**  **AIM:** Create a design using the basic concepts of HTML.  ALGORITHM:   1. Open a document and save it with program name.html 2. By using li and ul tag create an ordered list and unordered list should be created. 3. To each list create a link by using href attribute. 4. In one of the page, create a separate html page which has one heading with some text followed by paragraph using p tag. 5. Which will be followed for remaining headings also? Each para will be separated by hr tag. 6. An image should be displayed at the top right side. 7. Different pages should be created and displayed by clicking the links which are displayed by using lists.   **OUTPUT:** | |

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| |  | | --- | | **PROGRAM NO.: 2 DATE:**  **AIM:** Create a design using the concept of tables.  ALGORITHM:   1. Create a document and save it with html 2. By using table tag create a table. 3. For heading use the th tag and for data use the td tag 4. Background color should be applied for each table row. 5. For merging rows or columns, use colspan and rowspan 6. A time table format table should be displayed at last as per the conditions given in the question.   **OUTPUT:** | |
| **Test Cases:**   1. A html page should be displayed which shows some clear description of time table. 2. Each row should be showed with different kinds of colors. 3. There should be few merging of rows and columns should be there.   **PROGRAM NO: 3 DATE:**  **AIM:** Create a design using the concept of frames.  ALGORITHM:   1. create a html document by saving it with program name.html 2. by using frame tag, frames should be created 3. partition of columns, rows will be made by frameset tag 4. Top of the frame should contain of different images 5. In the middle left frame, 3 links should be created by anchor tag and target should be set on which frame, that particular page should be displayed. 6. Each separate html pages should be created with different images by using img tag, lists by using li tag, paragraph by using p tag. When we click the links, pages should be properly displayed   **OUTPUT** |

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| **TEST CASES:**   1. A html page should be displayed which shows the division of page by 3 columns. 2. On the 1st top frames. Different images to be displayed. 3. In the second frame, on the left corner 3 links should be displayed. 4. By clicking that links different pages should be displayed in the middle of the frame or right side of the frame. 5. At the last bottom footer frame, some copyright should be displayed. |

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| **Test Cases:**  1. htmlfile should be displayed in frames.  2. If we click one link inside the frame, the corresponding page linked to frame link should be displayed  3. It should be displayed on same frame or next frame based on the code.  **PROGRAM NO:6 DATE:**  **AIM:** Create an admission form using HTML and CSS.  **ALGORITHM:**  1. Open a word document ans save it with .html  2. open html tag and write code for text boxes for username, password, phone number  3. add background color by using bgcolor tag.  4. add a logo at the top middle of the page by using frames.  5. create a radio button for gender  6. create a checkboxes for qualification  7. create a dropdown box for select statement  8. create a file button for uploading files.  9. create a button for submit, reset and cancel  10. save the program and open the document in browser  **OUTPUT:**    **Test cases:**   1. Html page should be displayed with background color and a logo at the middle of the top frame 2. College registration form should be displayed with different text boxes as input 3. Radio button for gender should be displayed 4. Different check boxes for qualification to be displayed 5. Drop down box for select state option to be displayed 6. Submit button to be displayed for submitting the data after clicking the button 7. Reset button should be displayed to reset the entered data. |

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| PROGRAM NO.: 7 DATE:  AIM: Create a design for displaying a menu bar  ALGORITHM:   1. Open a document and save it with programname.html 2. Take a unordered list tag and insert the data inside the tags 3. Div tag should be implemented inside the list tags in to display the menu bar in drop down way 4. Apply background color for the menu bar by using css or by using style tag   **OUTPUT:**    Test cases:   1. An html page should be displayed with background menu bar as green 2. There should be one drop down menu bar to be displayed which shoes some list of items |

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| PROGRAM NO.: 8 DATE:  AIM: Write a JavaScript program that adds two numbers when ADD button is pressed  ALGORITHM:   1. HTML page should be created in a document by saving it with program name. html 2. Two textboxes should be created in order to enter the data 3. One more text box to be created in order to display the result inside it 4. A button is created by button tag. 5. After clicking the button adding two numbers operation should be done. 6. In the head tag script tag should be opened 7. Inside the script tag, a function should be created to write the code for addition of two numbers 8. Create two variables. To each variable, store the number which user enters in the textbox by getElemntById function   **OUTPUT:** |

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| **Test Cases:**   1. Three text boxes should be displayed , in the two text boxes for taking input and one for displaying the output inside it. 2. A button is displayed, after clicking it adding of two numbers should be done and successfully displayed inside the result textbox.   PROGRAM NO.: 9 DATE:  AIM: Design a HTML page having a text box and four buttons viz Factorial, Fibonacci, Prime, and Palindrome. When a button is pressed an appropriate java script function should be called to display the following:  a. factorial of that number  b. fibonacci series up to that number  c. prime numbers up to that number  d. is it palindrome or not?  ALGORITHM:   1. HTML page should be created in a document by saving it with program name. html 2. one textboxes should be created in order to enter the data 3. 4 buttons are created by using the button tag. 4. After clicking the button factorial of a number operation should be done. 5. In the head tag, script tag should be opened. 6. Inside the script tag, a function should be created to write the logic for factorial of a number 7. Create variables. To each variable, store the number which user enters in the textbox by getElemntById function. 8. In the same way result should be stored in one more variable by using id of result textbox.     **OUTPUT:**    **Test Cases:**   1. Two text boxes should be displayed, in that one text box is for taking input and one for displaying the output inside it. 2. A button is displayed, after clicking it factorial of a number should be done and successfully displayed inside the result textbox. |

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| PROGRAM NO.:10 DATE:  AIM: Write Java script programs to demonstrate the following objects with atleast five methods:  a. Math.  b. String.  c. Array.  d. Date.  **OUTPUT:** |

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| PROGRAM NO.: 11 DATE:  AIM: Write a JavaScript program to find the kth smallest element in an array.  ALGORITHM:   1. Create a html document 2. Inside the script tag, take a prompt box which asks to enter numbers 3. By using the loops, input should be taken until it fails 4. One more prompt box to be created to enter the kth value. 5. Write the logic for the kth small element in an array 6. Display the smallest element by using document.write() function.   **OUTPUT:** |

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| **Test cases:**   1. An html page should be displayed with one prompt box 2. It should take sequence of inputs until user stops to give input 3. One more prompt box to be opened to enter the kth smallest element. 4. After clicking the ok button, output should be displayed with all the elements and kth smallest element |

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| PROGRAM NO.: 12 DATE:  AIM: Write a JavaScript program to display prime numbers between a range  **OUTPUT:** |

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| PROGRAM NO.: 13 DATE:  AIM: Write a JavaScript program to print the pattern  **OUTPUT:** |

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| PROGRAM NO.: 14 DATE:  AIM: Write a JavaScript program to perform arithmetic operations when the corresponding button is pressed  **OUTPUT:**    PROGRAM NO.: 15 DATE:  AIM: Write a JavaScript program for form validation  **OUTPUT:**    PROGRAM NO.: 16 DATE:  AIM: Write a JDBC program to Create a table emp  OUTPUT: |

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| PROGRAM NO.: 17 DATE:  AIM: Write a JDBC program to insert values into table emp  OUTPUT:    PROGRAM NO.: 18 DATE:  AIM: Write a JDBC Program to select and display data from a table  OUTPUT:    PROGRAM NO.: 19 DATE:  AIM: Write a JDBC Program to Update salary of each employee by 10%  ALGORITHM:   1. Load the jdbc driver 2. Create a connection with the database 3. Create a statement object to execute query 4. execute the sql query by writing it. 5. Close the connection   OUTPUT:    Test cases:   1. Connect to the jdbc driver successfully 2. Updation of employee should be successfully done by 10% 3. Rows which are updated should be displayed   PROGRAM NO.: 20 DATE:  AIM: Write a JDBC Program to delete a record with id 101  ALGORITHM:   1. Load the jdbc driver 2. Create a connection with the database 3. Create a statement object to execute query 4. Execute the sql delete query. 5. Close the connection   OUTPUT:    Test cases:   1. Connect to the jdbc driver successfully 2. Deletion of record with id 101 should be successfully done after executing it. 3. Remaining rows should be displayed other than id 101.   PROGRAM NO.: 21 DATE:  AIM: Write a JDBC Program to insert values into table using Prepared Statement  ALGORITHM:   1. Load the driver main class 2. Establish a connection with the jdbc driver 3. Create a sql prepared statement with parameters 4. Write scanner class statement to take input from the user 5. For each SQL statement received, the DB builds a query plan by parsing the SQL statement 6. Repeatedly execute SQL with same query until it fails condition. 7. Close the connection   OUTPUT:      Test cases:   1. Connection to the jdbc should be successfully done 2. Compile the program 3. Enter the input based on the query parameters. 4. Execute the uery by select statement 5. All the values which are given by the user should be displayed.   PROGRAM NO.: 22 DATE:  AIM: Write a Servlet program to read data from registration form and display that data  ALGORITHM:   1. Create a html page of registration page. 2. Create a servlet class by extending httpservlet 3. Create a method to access inputs from the textbox, what user has given 4. Create a variable a of string datatype and access the data from particular textbox name by getparameter method. 5. Print the output by embedding html code in out.println method   OUTPUT:      Test cases :   1. Html page should be successfully displayed. 2. User should able to give the input properly in the given input boxes. 3. After clicking the submit button, data should be successfully displayed of what user has given input.   PROGRAM NO.: 23 DATE:  AIM: Write a Servlet program to store data entered in a registration form into a database  ALGORITHM:   1. Create a html page of registration. 2. Create a servlet class by extending httpservlet 3. Create a method dopost() to access inputs from the textboxes, what user has given 4. Create a variable of string datatype and access the data from particular textbox name by getparameter method. 5. Create a connection with the jbdc driver by loading it. 6. Create a statement object to execute query 7. Write the query to insert values 8. Execute the query by executeupdate() method. 9. After execution display whether successfully inserted or not.   OUTPUT:        Test cases:   1. Html page should be successfully displayed 2. User should able to enter the data successfully in html page. 3. After inserting the input, it should get a statement of successfully inserted message as output 4. Open command prompt and connect to the sql 5. Execute the query to display the details of what user has entered. 6. User details should be successfully displayed.   PROGRAM NO.: 24 DATE:  AIM: Write a JSP program to read data from registration form and display that data  ALGORITHM:   1. Create an html page of registration page. 2. Create a JSP class 3. Create a method to access inputs from the textbox, what user has given 4. Create a variable a of string datatype and access the data from particular textbox name by getparameter method. 5. Print the output by embedding html code in out.println method   OUTPUT:      Test cases :   1. Html page should be successfully displayed. 2. User should able to give the input properly in the given input boxes. 3. After clicking the submit button, data should be successfully displayed of what user has given input.   **Viva:**   1. Which method is used to retrieve the data from html form? 2. Which method is used to execute select query on table? 3. What is use of Class.forName statement? 4. Write the use of executeUpdate() method?   PROGRAM NO.: 25 DATE:  AIM: Write a JSP program to store data entered in a registration form into a database  ALGORITHM:   1. Create a html page of registration. 2. Create a jsp class by extending httpservlet 3. Create a method dopost() to access inputs from the textboxes, what user has given 4. Create a variable of string datatype and access the data from particular textbox name by getparameter method. 5. Create a connection with the jbdc driver by loading it. 6. Create a statement object to execute query 7. Write the query to insert values 8. Execute the query by executeupdate() method. 9. After execution display whether successfully inserted or not.   OUTPUT:        Test cases:   1. Html page should be successfully displayed 2. User should able to enter the data successfully in html page. 3. After inserting the input, it should get a statement of successfully inserted message as output 4. Open command prompt and connect to the sql 5. Execute the query to display the details of what user has entered. 6. User details should be successfully displayed.   **Viva:**   1. Which method is used to retrieve the data from html form? 2. Which method is used to execute select query on table? 3. What is use of Class.forName statement? 4. Which object returns by excuteQuery () method? |