

Academic Year 2023-24

B. Tech. Semester - IV

Tutorial | Lab Planning

2101CS402 - MADF

Lab	Туре	Practical
Unit	: I -	Introduction
1	A. A. A. A. A.	WAP to print your name in console. WAP to Print addition of 2 number. WAP to convert temperature from Fahrenheit to Celsius. WAP to find percentage of 5 subject. WAP that reads a number in meters, converts it to feet, and display the result. Body Mass Index (BMI) is measure of health on weight. It can be calculated by taking your weight in kilograms and dividing by square of your height in meters. Write a program that prompts the user to enter a weight in pounds and height in inches and display the BMI. Note: 1 pound=.45359237 Kg and 1 inch=0.254 meters.
2	A. A. A. A.	WAP to check whether the given number is positive or negative.  WAP to perform Addition, Subtraction, Multiplication, Division based on user choice using if, ifelseif, & switch.  WAP to find out largest number from given three numbers without using Logical Operator.  WAP to read marks of five subjects. Calculate percentage and print class accordingly. Fail below 35, Pass Class between 35 to 45, Second Class between 45 to 60, First Class between 60 to 70, Distinction if more than 70.  WAP to find out largest number from given 3 numbers using conditional operator.  WAP to make a Simple Calculator using switchcase
3	A. A. A. A. A.	WAP to print numbers between two given numbers which is divisible by 2 but not divisible by 3.  WAP to find factorial of the given number.  WAP to find whether the given number is prime or not.  WAP to print given number in reverse order.  WAP to print reverse string.  WAP program to calculate the sum of all positive even numbers and the sum of all negative odd numbers from a set of numbers. you can enter 0 (zero) to quit the program and thus it displays the result.
4	A. A. A. A.	(Using named parameter, positional parameter, default parameter only)  WAP to calculate simple interest using method.  WAP to find maximum number from given two numbers using method.  WAP to generate Fibonacci series of N given number using method.  WAP to accept a number and check whether the number is prime or not. Use method name check (int n). The method returns 1, if the number is prime otherwise, it returns 0.  WAP to count number of even or odd number from an array of n numbers.



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5	A.	WAP that prompts the user to enter 5 numbers, stores them in a List, and displays them in increasing order.
	A.	WAP to read 2 list and return list that contains only the elements that are common between them.
	A.	WAP that creates List with following value: "Delhi", "Mumbai", "Bangalore", "Hyderabad" and "Ahmedabad" Replace "Ahmedabad" with "Surat" in above List.
	A.	
	A.	WAP to find friends detail by their name using dictionary. (Create local dictionary and search
		from it using Map <string,object?> &amp; Model Class).</string,object?>

either 3 or 5.

WAP to get current date from system and format into different date formats. Ex.

WAP to accept n numbers in an array. Display the sum of all the numbers which are divisible by

- dd/MM/yyyy dd-MM-yyyy dd-MMM-yyyy dd-MM-yy
- B. dd MMM, yyyy etc.
- **B.** WAP to create common date format method in Util Class and access in different classes (with and without inheritance)

Unit : II – UI Design, State Management, Navigation					
6	A.	Write a flutter code to divide horizontal space of screen in 3 different equal parts with different colors.			
	A.	Write a flutter code to divide the vertical space of the screen in 3 different equal parts with different colors.			
	В.	Write a flutter code to divide the whole screen into 9 (equal size and the different size) with different colors.			



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7	A. A. A. B.	Write a flutter code to display "hello world" using <b>Text</b> widget. Change color & size of text using different properties.  Write a flutter code to create a custom <code>Text</code> widget with different fonts & use it.  Write a flutter code to use <b>TextField</b> and print the input value into the <b>terminal</b> using the controller.  Write a flutter code to use <b>TextField</b> & apply different borders, floating labels, hint text etc.,  Write a flutter code to print <b>TextField</b> value into <b>Text</b> widget on a click of a <b>Button</b> .
8	A. A. B. B.	Write a flutter code to display an <code>Image</code> into the Image asset widget from the <code>asset</code> folder.  Write a flutter code to display an <code>Image</code> from a WEB URL using a cached network Image.  Write a flutter code to use <code>Stack</code> widget and show text upon an Image.  Write a flutter code to create a birthday card using different widgets.  Write a flutter code to roll a dice on the <code>Button</code> click event.  Design splash screen as given in the sample attached.
9	A. A. B. B.	Write a flutter code to do navigation between two different pages using a material page route.  Write a flutter code to do navigation between two different pages using a name route.  Write a flutter code to use the bottom NavigationBar & on click display different pages.  Write a flutter code to create a dynamic Birthday card.
10	A. A. A.	Write a flutter code to use <b>TabView</b> and display different pages on different tab clicks.  Write a flutter code to use the <b>NavigationDrawer</b> & display different pages on different menu clicks.  Write a flutter code to use the <b>ActionBar</b> widget and display menu in it and display Alert Dialog on menu click.
11	A. A. B. B. B.	Write a flutter code to create login screen login for username & password using <code>Textfield</code> , <code>Button</code> etc., Write a flutter code to do validation in the login screen. (Email Validation & Password Validation) on <code>Button</code> click. Write a flutter code to create a registration screen using different widgets. Write a flutter code to do validation in the registration screen. Add password visibility icon in the <code>Text</code> field.
Unit : III – Database Connectivity		
12	A. A.	Create different tables for the to-do list app in SQLite and attach a · db file with the flutter project.  Use db queries to get records for the practical 13 (A).  • Select All Data  • Select data using join
	В.	Query table and display data in terminal using print.



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13	A. A. B.	Write a flutter code to design To-Do list insert screen and do validation on it. Write a flutter code to insert data into the table. Write a flutter code to fill country list in dropdown and then fill Satelist based on selected country and then fill city dropdown based on state.
14	A. A. B.	Write a flutter code to list data into the List view. Write a flutter code to display a list with different colors with different priority. Write a flutter code to sort data by options: A->Z & Z-A.
15	A. A. B.	Write a flutter code pass data from list to edit page and edit record in table.  Write a flutter code to place delete button in list page and on click delete button show alert dialog for confirmation for delete and delete data from table and refresh the page with updated data.  Write a flutter code to delete data from table and from list and refresh page.
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Unit : i	IV – Acces	ssing Rest API
16	A.	Write a flutter code to fetch json file from asset folder & parse json data and display data in widget.
	В.	Write and flutter code to generate model class from json.
17	А. А. В.	Write a flutter code to call rest api (using Mockapi) with <b>GET</b> Method with httpclient library and display data in List widget using future builder. Write a flutter code pass <b>Path Variable</b> and <b>Query Variable</b> as parameter in GET Method and display single recod in full screen page. Write a flutter code to call rest api and display data in listview.builder with pagination (Lazzy Loading).
18	A. B.	Write a flutter code to display country list in dropdown on selection of country call state api and fill data in state list after selection state call city api and fill city list in driodown. Write a flutter code call nested api (prefill 3 dropdown before).
19	A. B.	Write a flutter code to design entry screen with Name, DOB, City, Address, etc validate it & save data to webserver using <b>POST</b> method with formurlencoded. Write a flutter code to refresh list with updated data without creating new instance of list screen.
Unit:	V – Advai	nce Application Development
20	A.	Write a flutter code to request camera permission from user capture image using camera and store in external storage. Write a flutter code to display image from gallery using image widget.