

# **Flutter Assignments**

## **Software Engineering Assignment**

### **MODULE: 1**

#### **SE – Overview of IT Industry**

1. What is software? What is software engineering?
2. Explain types of software
3. What is SDLC? Explain each phase of SDLC
4. What is DFD? Create a DFD diagram on Flipkart
5. What is Flow chart? Create a flowchart to make addition of two numbers
6. What is Use case Diagram? Create a use-case on bill payment on paytm.

### **MODULE: 2**

#### **SE – HTML and CSS**

1. Define the terms: Website, Webpage, Web browser, Web server, HTML, CSS
2. Create a webpage to show “This is my first HTML page”
3. Display top 10 IT companies list in html webpage
4. Create a dropdown list
5. Create a Table Of college Management system using row span & colspan.
6. Create below table using HTML table tags

European Roulette													
0	3	6	9	12	15	18	21	24	27	30	33	36	2to1
	2	5	8	11	14	17	20	23	26	29	32	35	2to1
	1	4	7	10	13	16	19	22	25	28	31	34	2to1
	1st12				2nd12				3rd12				
	1to18		EVEN						ODD		19to36		

CSS3 Browser Support (latest browser versions)					
CSS Property	Internet Explorer	FireFox	Chrome	Safari	Opera
Border Radius	YES	YES	YES	YES	YES
Box Shadow	YES	YES	YES	YES	YES
CSS Animations	NO	NO	YES	YES	NO

7. Create Registration form using HTML, CSS
8. In how many ways can a CSS be integrated as a web page?
9. Create simple three pages using External CSS, Internal CSS, and Inline CSS.
10. Create below page using HTML CSS

**Individual Registration**

**User Particulars**

\* Login ID

\* Password

\* Confirm Password

**Personal Particulars**

\* Salutation

Middle Name

\* Resident Status

\* Email-Id

\* First Name

\* Last Name

\* Country

\* Mobile Number

**Account Particulars**

\* 15 Digit Account No

\* Fund Transfer

\* Nick Name

**DECLARATION**

I have read, understood and hereby agree to the Terms and Conditions in respect of all products and channels.

I understand that any changes in the terms and conditions applicable to this relationship would be made available to me on request at any IOB branches. I confirm that all accounts under this login name are operated singly and in case of joint account operated by either or survivor / anyone or survivor(s) under his/her joint name respectively. I do hereby declare that information furnished in this form is true to the best of my knowledge and belief.

11. Create link-pseudo classes using external css, to format links on the pages.
12. Create a dynamic pseudo class using HTML, CSS

## MODULE: 3

### SE – Fundamentals of Programming

#### Topics Covered

Basic Syntax

Data

Structures

Variables

### Basic Logic Program

1. Display This Information using printf
  - a. Your Name
  - b. Your Birth date
  - c. Your Age
  - d. Your Address
2. Write a program to make Simple calculator (to make addition, subtraction, multiplication, division and modulo)
3. WAP to Find Area And Circumference of Circle
4. Find Area of Square formula :  $a = a^2$
5. Find Area of Cube formula :  $a = 6a^2$
6. Find area of Triangle Formula :  $A = 1/2 \times b \times h$
7. Find area of Rectangle Formula :  $A = wl$
8. Find circumference of Rectangle formula :  $C = 4 * a$
9. Find circumference of Triangle formula :  $\text{triangle} = a + b + c$
10. find the area of a rectangular prism formula :  $A = 2(wl + hl + hw)$
11. Find circumference of square formula :  $C = 4 * a$
12. Accept number of students from user. I need to give 5 apples to each student. How many apples are required?
13. Find character value from ascii
14. Find ascii value of given number
15. Convert school's name in abbreviated form

16. Convert country's name in abbreviate form
17. Calculate person's insurance premium based on salary
18. Calculate person's Annual salary
19. Calculate compound interest
20. Accept monthly salary from the user and deduct 10% insurance premium, 10% loan installment find out of remaining salary.
21. Accept 2 numbers from user and swap 2 numbers with using 3<sup>rd</sup> variable and without using 3<sup>rd</sup> variable
22. Calculate compound interest (Compound Interest formula:
  - a. Formula to calculate compound interest annually is given by:  
Amount =  $P(1 + R/100)^t$
  - b. Compound Interest = Amount - P
23. WAP to calculate swap 2 numbers with using of multiplication and division.
24. Accept 5 employees name and salary and count average and total salary
25. Accept 5 expense from user and find average of expense
26. Convert temperature Fahrenheit to Celsius
27. Convert days into months
28. Convert years into days and months
29. Convert minutes into seconds and hours
30. WAP to convert years into days and days into years
31. Convert kilometers into meters
32. Accept 2 numbers and find out its sum check it size
33. C Program to Read Integer and Print First Three Powers ( $N^1$ ,  $N^2$ ,  $N^3$ )

### Topics Covered

**Control statements**

**Conditional Statements**

## Conditional Logic Programs:

1. Write a C program to accept two integers and check whether they are equal or not
2. Write a C program to read the value of an integer m and display the value of n is 1 when m is larger than 0, 0 when m is 0 and -1 when m is less than 0
3. WAP to check if the given year is a leap year or not.
4. WAP to make simple calculator (operation include Addition, Subtraction, Multiplication, Division, modulo) using conditional statement
5. Check Number Is Positive or Negative
6. Find the Character Is Vowel or Not
7. Accept marks from user and check pass or fail

8. WAP to accept the height of a person in centimeters and categorize the person according to their height.
9. C Program to Check Uppercase or Lowercase or Digit or Special Character
10. WAP to check whether a number is negative, positive or zero.
11. WAP to find number is even or odd using ternary operator
12. WAP to find maximum number among 3 numbers using ternary operator
13. WAP to find minimum number among 3 numbers using ternary operator
14. WAP to find the largest of three numbers.
15. Write a C program to determine eligibility for admission to a professional course based on the following criteria  
 Eligibility Criteria : Marks in Maths  $\geq 65$  and Marks in Phy  $\geq 55$  and Marks in Chem  $\geq 50$  and Total in all three subject  $\geq 190$  or Total in Maths and Physics  $\geq 140$  -----Input the marks obtained in Physics :65 Input the marks obtained in Chemistry :51 Input the marks obtained in Mathematics :72 Total marks of Maths, Physics and Chemistry : 188 Total marks of Maths and Physics : 137 The candidate is not eligible.
16. Write a C program to read temperature in centigrade and display a suitable message according to the temperature state below:  
 Temp  $< 0$  then Freezing weather  
 Temp 0-10 then Very Cold weather  
 Temp 10-20 then Cold weather  
 Temp 20-30 then Normal in Temp  
 Temp 30-40 then Its Hot  
 Temp  $\geq 40$  then Its Very Hot
17. Write a C program to check whether a triangle can be formed with the given values for the angles.
18. Write a C program to calculate profit and loss on a transaction.
19. Write a program in C to calculate and print the electricity bill of a given customer. The customer ID, name, and unit consumed by the user should be captured from the keyboard to display the total amount to be paid to the customer. The charge are as follow :

20. Unit	21. Charge/unit
22. upto 350	23. @1.20
24. 350 and above but less than 600	25. @1.50
26. 600 and above but less than 800	27. @1.80
28. 800 and above	29. @2.00

30. If bill exceeds Rs. 800 then a surcharge of 18% will be charged and the minimum bill should be of Rs. 256/-
31. Write a program in C to read any Month Number in integer and display the number of days for this month.
32. Write a C program to input basic salary of an employee and calculate its Gross salary according to following:  
Basic Salary  $\leq$  10000 : HRA = 20%, DA = 80%  
Basic Salary  $\leq$  20000 : HRA = 25%, DA = 90%  
Basic Salary  $>$  20000 : HRA = 30%, DA = 95%\
33. WAP to input the week number and print week day.
34. Accept month number and display month name
35. Accept the input month number and print number of days in that month.
36. Write a C program to input electricity unit charges and calculate total electricity bill according to the given condition:  
For first 50 units Rs. 0.50/unit  
For next 100 units Rs. 0.75/unit  
For next 100 units Rs. 1.20/unit  
For unit above 250 Rs. 1.50/unit  
An additional surcharge of 20% is added to the bill
37. WAP to show
  - i. Monday to Sunday using switch case
  - ii. Vowel or Consonant using switch case

### **Topics Covered**

#### **Looping Statements**

#### **Conditional Statements**

1. WAP to print 972 to 897 using for loop
2. WAP to accept 5 numbers from user and display all numbers
3. WAP to take 10 no. Input from user find out below values
  - a. How many Even numbers are there
  - b. How many odd numbers are there
  - c. Sum of even numbers
  - d. Sum of odd numbers
4. WAP to print table up to given numbers

5. WAP to print factorial of given number
6. WAP to print Fibonacci series up to given numbers
7. WAP to print number in reverse order e.g.: number = 64728 --->  
reverse = 82746
8. Write a program to find out the max from given number (E.g., No: -  
1562 Max number is 6)
9. Write a program make a summation of given number (E.g., 1523 Ans: -  
11) 10. Write a program you have to make a summation of first and last  
Digit. (E.g.,  
1234 Ans: -5)
11. Accept 5 names from user at run time.
12. Program of Armstrong Number in C Using For Loop & While  
Loop
13. calculate the Factorial of a Given Number using while loop
14. Accept 5 numbers from user and find those numbers factorials
15. Calculate sum of 10 numbers using of while loop
16. Calculate the Sum of Natural Numbers Using the While Loop
17. Calculate 5 numbers from user and calculate number of even and odd using  
of while loop
18. Write a C Program to Print the Multiplication Table of N
  - i. E.g.  $5 * 1 = 5$
  - ii.  $5 * 2 = 10$ 
    1. .
    2. .
  - iii.  $5 * 10 = 50$
19. Patterns:

1	A	*	*
1 0	B C	* * *	* *
1 0 1	D E F	* * * * *	* * *
1 0 1 0	G H I J	* * * * * *	* * * *
1 0 1 0 1	K L M N O	* * * * * *	* * * * *
			* * * * *
			* * * * *
			* * *
			*
1	A		
2 3	A B		
4 5 6	A B C		
7 8 9 10	A B C D		
11 12 13 14 15	A B C D E		



1	2	3	4	5	6	7	8	9	10
36	37	38	39	40	41	42	43	44	11
35	64	65	66	67	68	69	70	45	12
34	63	84	85	86	87	88	71	46	13
33	62	83	96	97	98	89	72	47	14
32	61	82	95	100	99	90	73	48	15
31	60	81	94	93	92	91	74	49	16
30	59	80	79	78	77	76	75	50	17
29	58	57	56	55	54	53	52	51	18
28	27	26	25	24	23	22	21	20	19

20. WAP program to print below output using for loop

01 02 03 04 05 06 07 08 09 10

11 12 13 14 15 16 17 18 19 20

.....

.....

41 42 43 44 45 46 47 48 49 50

22. Accept 3 numbers from user using while loop and check each numbers  
palindrome

23. C Program to Reverse a Number Using FOR Loop

Series Program:

24.  $1 + 2 + 3 + 4 + 5 + \dots + n$

25.  $(1*1) + (2*2) + (3*3) + (4*4) + (5*5) + \dots + (n*n)$

26.  $(1) + (1+2) + (1+2+3) + (1+2+3+4) + \dots + (1+2+3+4+\dots+n)$

27.  $1/2 - 2/3 + 3/4 - 4/5 + 5/6 \dots n$

28. 1 2 3 6 9 18 27 54...

### Topics Covered

**Function**

**Array**

1. Write a program to find out the max number from given array using function
2. WAP of Addition, Subtraction, Multiplication and Division using Switchcase.(Must Be Menu Driven)
3. WAP to find reverse of string using recursion
4. WAP to find factorial using recursion
5. WAP to take two Array input from user and sort them in ascending or descending order as per user's choice

6. WAP to make addition, Subtraction and multiplication of two matrix using 2-D Array
7. WAP Find out length of string without using inbuilt function
8. WAP to reverse a string and check that the string is palindrome or not  
Write a program of structure employee that provides the following
  - a. information -print and display empno, empname, address and age
  - b. Write a program of structure for five employee that provides the following information -print and display empno, empname, address and age
9. WAP to show difference between Structure and Union.
10. WAP to perform Palindrome number using for loop and function
11. WAP to accept 5 numbers from user and display in reverse order using for loop and array
12. WAP to accept 5 students name and store it in array
13. WAP to accept 5 numbers from user and check entered number is even or odd using of array
14. Perform 2D matrix array
15. Store 5 numbers in array and sort it in ascending order
16. Accept 5 numbers from user and perform sum of array
17. WAP to show difference between Structure and Union.

### Topics Covered

#### String

1. Write a program in C to find the length of a string without using library functions.
2. Write a program in C to separate individual characters from a string.
3. Write a program in C to print individual characters of a string in reverse order
4. Write a program in C to count the total number of words in a string.
5. Write a program in C to compare two strings without using string library functions.
6. Write a program in C to count the total number of alphabets, digits and special characters in a string.
7. Write a program in C to copy one string to another string.

8. Write a program in C to count the total number of vowels or consonants in a string.
9. Write a program in C to find the maximum number of characters in a string.
10. Write a program in C to extract a substring from a given string
11. Write a program in C to read a sentence and replace lowercase characters with uppercase and vice versa.
12. Write a program in C to find the number of times a given word 'is' appears in the given string.
13. Write a program in C to remove characters from a string except alphabets.
14. Write a program in C to combine two strings manually
15. Write a program in C to find the largest and smallest words in a string.

## **MODULE: 4**

### **OOPS Concept**

#### **Topics Covered**

##### **Basic Concepts of OOP**

1. WAP to print "Hello World" using C++
2. What is OOP? List OOP concepts
3. What is the difference between OOP and POP?

#### **Topics Covered**

##### **Basic Concepts of OOP**

1. WAP to create simple calculator using class
2. Define a class to represent a bank account. Include the following members:
3. Data Member:

- Name of the depositor
- Account Number
- Type of Account
- Balance amount in the account

### **Member Functions**

- To assign values
- To deposited an amount
- To withdraw an amount after checking balance
- To display name and balance

4. Write a C++ program to implement a class called Circle that has private member variables for radius. Include member functions to calculate the circle's area and circumference.
5. Write a C++ program to create a class called Rectangle that has private member variables for length and width. Implement member functions to calculate the rectangle's area and perimeter.
6. Write a C++ program to create a class called Person that has private member variables for name, age and country. Implement member functions to set and get the values of these variables.

### **Topics Covered**

**Constructor**

**Destructor**

**Encapsulation**

**Abstraction**

1. Write a program to find the multiplication values and the cubic values using inline function
2. Write a program of Addition, Subtraction, Division, Multiplication using constructor.
3. Write a C++ program to create a class called Car that has private member variables for company, model, and year. Implement member functions to get and set these variables.
4. Write a C++ program to implement a class called Bank Account that has private member variables for account number and balance. Include member functions to deposit and withdraw money from the account.
5. Write a C++ program to create a class called Triangle that has private member variables for the lengths of its three sides. Implement member functions to determine if the triangle is equilateral, isosceles, or scalene.
6. Write a C++ program to implement a class called Employee that has private member variables for name, employee ID, and salary. Include member functions to calculate and set salary based on employee performance. Using of constructor
7. Write a C++ program to implement a class called Date that has private member variables for day, month, and year. Include member functions to set and get these variables, as well as to validate if the date is valid.
8. Write a C++ program to implement a class called Student that has private member variables for name, class, roll number, and marks. Include member functions to calculate the grade based on the marks and display the student's information. Accept address from each student implement using of aggregation

## Topics Covered

### Inheritance

### Polymorphism

1. Assume a class cricketer is declared. Declare a derived class batsman from cricketer. Data member of batsman. Total runs, Average runs and best performance. Member functions input data, calculate average runs, Displaydata. (Single Inheritance)
2. Write a C++ Program to find Area of Rectangle using inheritance
3. Create a class person having members name and age. Derive a class student having member percentage. Derive another class teacher having member salary. Write necessary member function to initialize, read and write data. Write also Main function (Multiple Inheritance)
4. Write a C++ Program display Student Mark sheet using Multiple inheritance
5. Assume that the test results of a batch of students are stored in three different classes. Class Students are storing the roll number. Class Test stores the marks obtained in two subjects and class result contains the total marks obtained in the test. The class result can inherit the details of the marks obtained in the test and roll number of students. (Multilevel Inheritance)
6. Write a C++ Program to show access to Private Public and Protected using Inheritance
7. Write a C++ Program to illustrates the use of Constructors in multilevel inheritance
8. Write a program to Mathematic operation like Addition, Subtraction, Multiplication, Division Of two number using different parameters and Function Overloading
9. Write a Program of Two 1D Matrix Addition using Operator Overloading
10. Write a program to concatenate the two strings using Operator Overloading
11. Write a program to calculate the area of circle, rectangle and triangle using Function Overloading
  - Rectangle: Area \* breadth
  - Triangle:  $\frac{1}{2}$  \* Area \* breadth
  - Circle: Pi \* Area \* Area

12. Write a program to swap the two numbers using friend function without using third variable
13. Write a program to find the max number from given two numbers using friend function

- **Topics Covered**

**Templates**

1. Write a program of to swap the two values using template
2. Write a program of to sort the array using templates

## **MODULE: 5 (Database)**

- **Topics Covered**

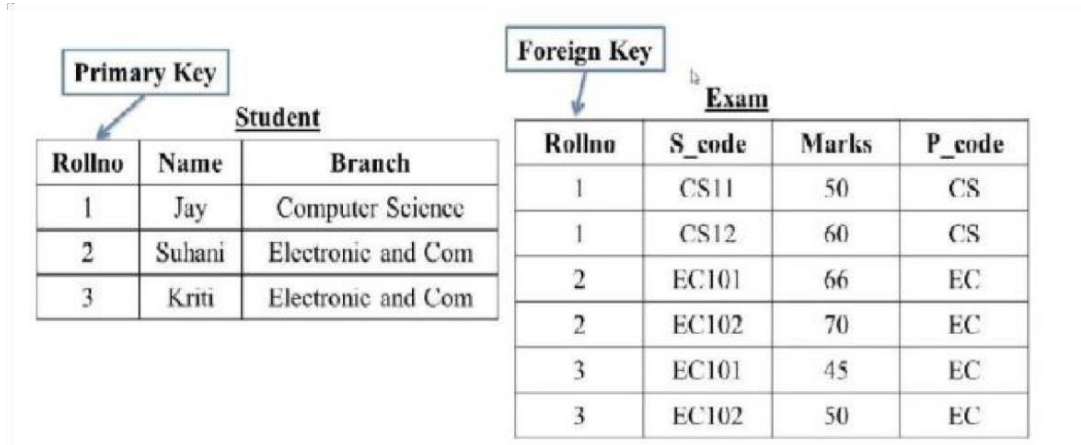
**Basics of Database**

1. What do you understand By Database
2. What is Normalization?
3. What is Difference between DBMS and RDBMS?
4. What is MF Cod Rule of RDBMS Systems?
5. What do you understand By Data Redundancy?
6. What is DDL Interpreter?
7. What is DML Compiler in SQL?
8. What is SQL Key Constraints writing an Example of SQL Key Constraints
9. What is save Point? How to create a save Point write a Query?
10. What is trigger and how to create a Trigger in SQL?

## Topics Covered

### SQL Queries

#### 1. Create Table Name : Student and Exam





2. Create table given below: Employee and IncentiveTable

Employee_id	First_name	Last_name	Salary	Joining_date	Department
1	John	Abraham	1000000	01-JAN-13 12.00.00 AM	Banking
2	Michael	Clarke	800000	01-JAN-13 12.00.00 AM	Insurance
3	Roy	Thomas	700000	01-FEB-13 12.00.00 AM	Banking
4	Tom	Jose	600000	01-FEB-13 12.00.00 AM	Insurance
5	Jerry	Pinto	650000	01-FEB-13 12.00.00 AM	Insurance
6	Philip	Mathew	750000	01-JAN-13 12.00.00 AM	Services
7	TestName1	123	650000	01-JAN-13 12.00.00 AM	Services
8	TestName2	Lname%	600000	01-FEB-13 12.00.00 AM	Insurance

Name: Employee

Table Name:

Incentive

Employee_ref_id	Incentive_date	Incentive_amount
1	01-FEB-13	5000
2	01-FEB-13	3000
3	01-FEB-13	4000
1	01-JAN-13	4500
2	01-JAN-13	3500

3. Get First\_Name from employee table using Tom name "Employee Name".
4. Get FIRST\_NAME, Joining Date, and Salary from employee table.
5. Get all employee details from the employee table order by First\_Name

Ascending and Salary descending?

6. Get employee details from employee table whose first name contains 'J'.
7. Get department wise maximum salary from employee table order by
8. salary ascending?
9. Select first\_name, incentive amount from employee and incentives table for those employees who have incentives and incentive amount greater than 3000
10. Create After Insert trigger on Employee table which insert records in view table
11. Create table given below: Salesperson and Customer

TABLE-1

TABLE NAME- SALESPERSON

(PK)SNo	SNAME	CITY	COMM
1001	Peel	London	.12
1002	Serres	San Jose	.13
1004	Motika	London	.11
1007	Rafkin	Barcelona	.15
1003	Axelrod	New York	.1

TABLE-2

TABLE NAME- CUSTOMER

(PK)CNM.	CNAME	CITY	RATING	(FK)SNo
201	Hoffman	London	100	1001
202	Giovanne	Roe	200	1003
203	Liu	San Jose	300	1002
204	Grass	Barcelona	100	1002
206	Clemens	London	300	1007
207	Pereira	Roe	100	1004

12. Retrieve the below data from above

table 13. All orders for more than \$1000.

14. Names and cities of all salespeople in London with commission above 0.12
15. All salespeople either in Barcelona or in London
16. All salespeople with commission between 0.10 and 0.12. (Boundary

values should be excluded).

17. All customers excluding those with rating  $\leq 100$  unless they are located in Rome
18. Write a SQL statement that displays all the information about all salespeople

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

19. From the following table, write a SQL query to find orders that are delivered by a salesperson with ID. 5001. Return ord\_no, ord\_date, purch\_amt.

*Sample table: orders*

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948.5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

20. From the following table, write a SQL query to select a range of products whose price is in the range Rs.200 to Rs.600. Begin and end values are included. Return pro\_id, pro\_name, pro\_price, and pro\_com.

*Sample table:* item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

21. From the following table, write a SQL query to calculate the average price for a manufacturer code of 16. Return avg.

*Sample table:* item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

22. From the following table, write a SQL query to display the pro\_name as 'Item Name' and pro\_price as 'Price in Rs.'

*Sample table:* item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

23. From the following table, write a SQL query to find the items whose prices are higher than or equal to \$250. Order the result by product price in descending, then product name in ascending. Return pro\_name and pro\_price.

*Sample table:* item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

24. From the following table, write a SQL query to calculate average price of the items for each company. Return average price and company code.

*Sample table:* item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12

# Flutter

## Assignments

### Module – 1

#### Flutter – Introduction

1. Display This Information using print
  - Your Name
  - Your Birth date
  - Your Age
  - Your Address
2. Write a program to make addition, Subtraction, Multiplication and Division of Two Numbers.
3. Write a program to make a square and cube of number.
4. Write a program to find the Area of Circle
5. Write a program to find the Area of Triangle
6. Write a program to find the simple Interest.
7. Write a program to convert temperature from degree centigrade to Fahrenheit.
8. Write a program to calculate sum of 5 subjects & find the percentage. Subject marks entered by user.
9. Write a Program to show swap of two No's without using third variable.
10. Write a Program to check the given number is Positive, Negative.

## Module – 2

### Flutter – Dart Programing

11. Write a Program to check the given year is leap year or not.
12. Write a Program to check the given number is prime or not prime.
13. Write a program to find the Max number from the given three number using Nested If
14. Write a program to find the Max number from the given three number using Ternary Operator
15. Write a program to find the Max number from the given three number using Nested If
16. Write a program user enter the 5 subjects mark. You have to make a total and find the percentage. percentage > 75 you have to print "Distinction" percentage > 60 and percentage <= 75 you have to print "First class" percentage >50 and percentage <= 60 you have to print "Second class" percentage > 35 and percentage <= 50 you have to print "Pass class" Otherwise print "Fail"
17. Write Program use switch statement. Display Monday to Sunday
18. Write a Program of Addition, Subtraction ,Multiplication and Division using Switch case.(Must Be Menu Driven)
19. Write a program of to find out the Area of Triangle, Rectangle and Circle using If Condition.(Must Be Menu Driven)
20. Looping Programs

Write a program to print the 1 to 10 using For loop. Write a

Program to print the 51 to 60 using while loop

Write a program to print the 100 to 81 using do                      while loop

Write a program you have to find the factorial of given number.

Write a program you have to print the Fibonacci series up to user given number

Write a program you have to print the table of given number. Write a program to print the number in reverse order.

Write a program to find out the max from given number (E.g. No: -1562  
Max number is 6

Write a program make a summation of given number

(E.g. 1523 ans :-11)

Write a program you have to make a summation of first and last Digit.  
(E.g. 1234 ans:-5)



Create Below Patterns:

* ** *** **** *****	1 12 123 1234 12345	1 22 333 4444 55555	* ** *** **** *****
1 21 321 4321 54321	* ** *** **** *****	* * * * * * * * * * * * * * *	1 1 2 1 2 3 1 2 3 4 1 2 3 4 5
1 2 2 3 3 3 4 4 4 4 5 5 5 5 5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1 0 1 1 0 1 1 0 1 0 1 0 1 0 1	1 4 4 9 9 9 16 16 16 16 25 25 25 25 25

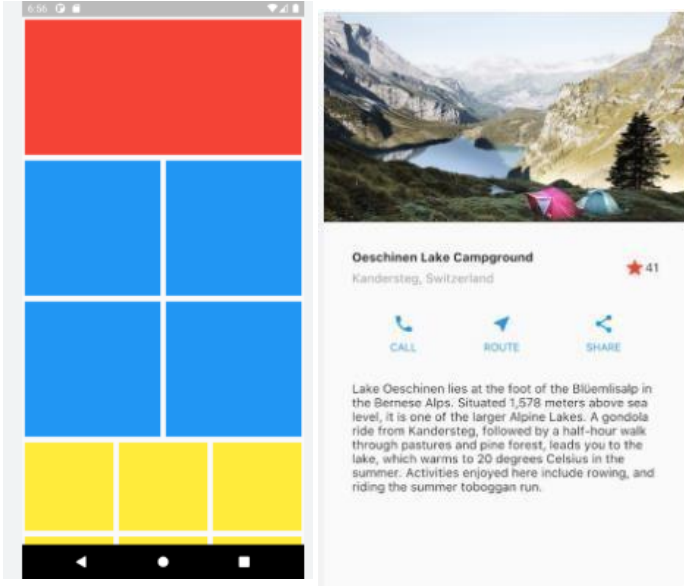
21. What is inheritance?
22. Which inheritance is not supported by Dart? Why? B3. What is advantage of inheritance?
23. Difference between inheritance and encapsulation. B5. Difference between inheritance and abstraction.
24. Difference between inheritance and polymorphism
25. Can we override static method in Dart?
26. Can we overload static method in Dart?
27. Can a class implement more than one interface? B10. Can a class extend more than one class in Dart?
28. Can an interface extend more than one interface in Dart?
29. What will happen if a class implements two interfaces and they both have a method with same name and signature?
30. Can we pass an object of a subclass to a method expecting an object of the super class? B14. Are static members inherited to sub classes?
31. What happens if the parent and the child class have a field with same identifier? B16. Are constructors and initializers also inherited to sub classes?
32. How do you restrict a member of a class from inheriting by its sub classes?
33. How do you implement multiple inheritance in Dart?
34. Can a class extend by itself in Dart?
35. How do you override a private method in Dart?
36. When to overload a method in Dart and when to override it?
37. What the order is of extends and implements keyword on Dart class declaration?

38. How do you prevent overriding a Dart method without using the final modifier?
39. What are the rules of method overriding in Dart?
40. Difference between method overriding and overloading in Dart.
41. What happens when a class implements two interfaces and both declare field (variable) with same name?
42. Can a subclass instance method override a superclass static method?
43. Can a subclass static method hide superclass instance method?
44. Can a superclass access subclass member?
45. Difference between object oriented and object based language.
46. Create a program using List
47. Create a program using Set
48. Create a program using Map

## Module 3

### Flutter - UI Designing and Development

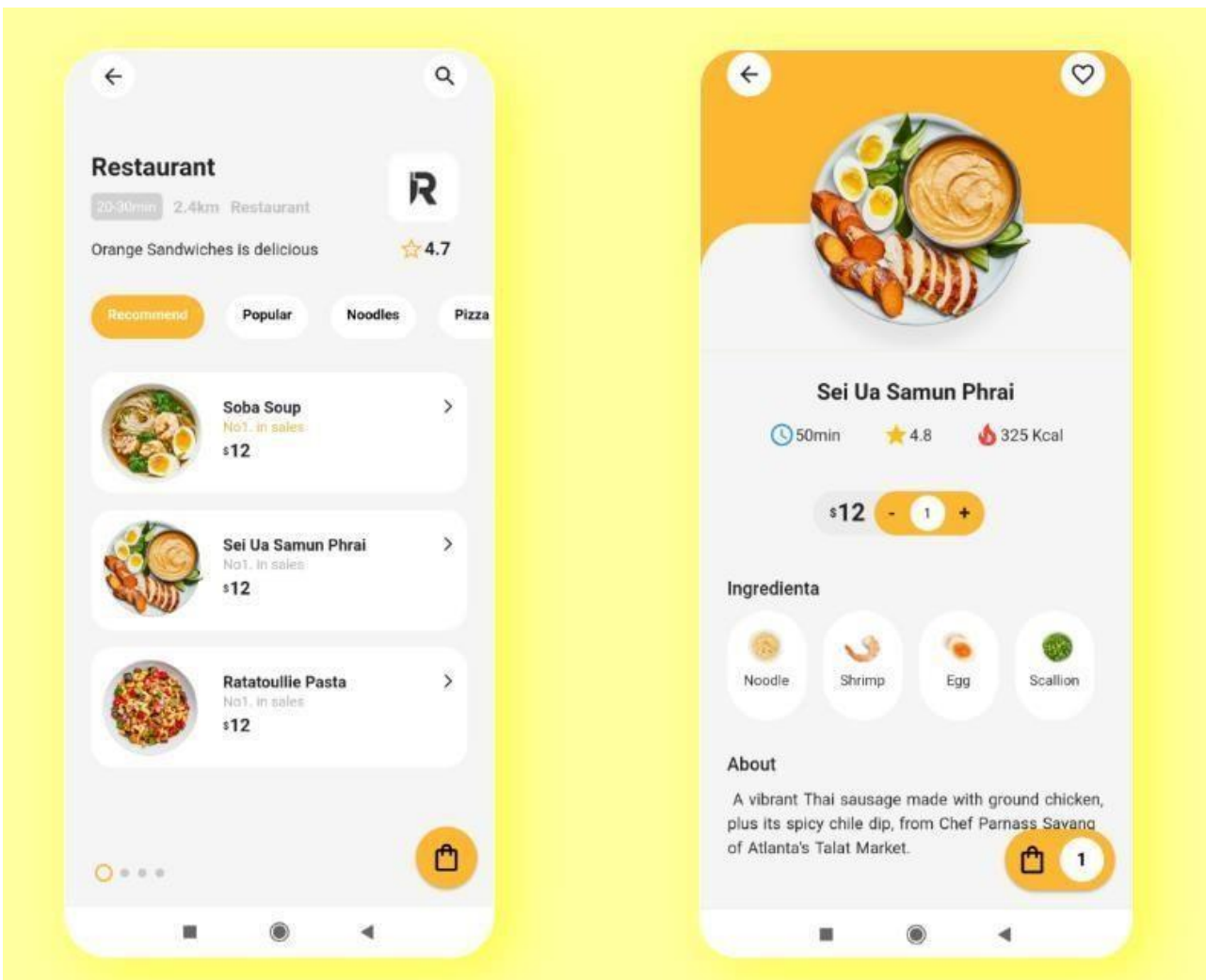
1. Create below screens



2. Create an application to take input number from user and print its reverse number in TextField
3. Create an application to input 2 numbers from user and all numbers between those 2 numbers in next activity
4. Create an application with radio buttons (Add, Substraction, Multiply, Division) EditText (number1, number2) and print result as

per user choice from radio button in TextView

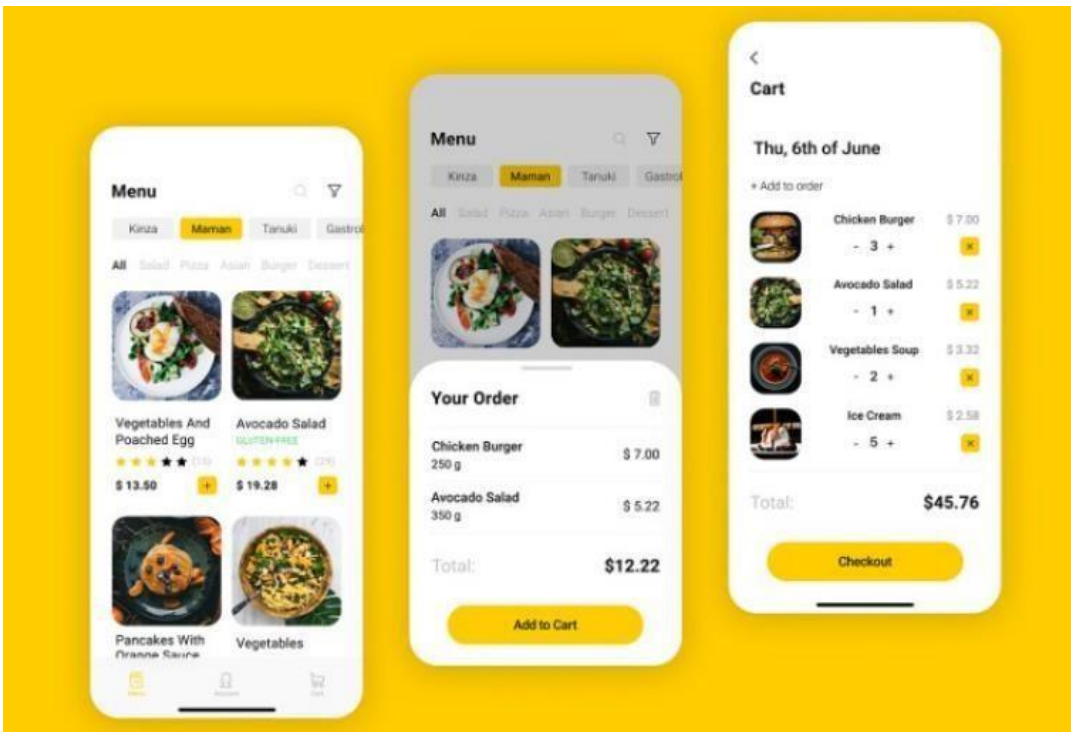
5. create an application to change background when button is clicked
6. create an application to increase font size when plus button click and decrease when minus button click
7. create an application to display TextView when checkbox is checked and hide otherwise
8. Write a program to show four images around TextView.
9. Write a program in android display screen color which the Color will be select from the radio button.
10. Write a program you have taken three seek bar controls. From three Seekbar which Seekbar value changed the background color of device will be changed.
11. Create login and registration form
12. Design below screens



# Module 4

## Flutter – Advance

### UI Designing and Development



13. Create custom toolbar as per given below design Create toolbar with spinner and search functionality
14. Write a code to display simple alert dialog with title, description and icon when button is clicked
15. Write a code to display alert dialog with positive, negative and neutral button and display toast respectively user's choice
16. Write a code to display alert dialog with list of cities and Single choice selection display selected city in TextView
17. open alert dialog when user want to exit from the application
18. Write a code to select Date on button's click event
19. Write a code to display profile and logout option in options menu
20. Write a code to display edit, view, delete options with context menu

in listview and also perform respective operation on user's choice

21. Create an application like gmail and display Screens according to user selection and design each page with dummy data
22. Create an application with bottom navigation with 3 tabs Gallery, audio and video and design each page with dummy data
23. Create an application with Navigation Drawer with 3 tabs Gallery, audio and video and design each page with dummy data
24. create a Phone call App when user first time open the app it will automatically generate one dialog which has two option allow, deny if click on allow permission is grant in settings
25. Write a code to display Splash Screen using Activity
26. Write a code to redirect user from one activity to another when button click.
27. Create an Android Application which Manage Activity Lifecycle Stages and Showing Toast with Performing Different Stages.
28. Create an Application to take input two numbers from users and when user press button then display sum of those values of next Activity.
29. Call via url\_launcher, Send Sms via url\_launcher
30. Write a program to add name from the text view and insert into the listview. If you click on the listview then name should be show in the dialog box. When user press for 2 seconds on particular List item then open Context Menu (Delete Item, Edit Item, Exit). If user click on Delete Item then Open one Alert Dialog with message ("Are you sure want to delete Item?") and yes, no button if user press yes button then remove item from list. (Click a DELETE button, it gives a confirm box) If user click on Edit item then selected item display on EditText and again user click on button then this (updated item) should be replace with old item

## **Module 5**

### **Flutter**

#### **Offline Database – SQFLITE**

To create task management application for adding, updating, deleting the task and show the

tasks in the listview or gridview. Task have name, description, date, time, priority. • To sort the task by the date and time wise. • If task is due then automatically show as blue color. • It will search the tasks by date wise. • If high priority then show as red color, average priority as blue color, low priority as green color. • Select specified item and open context menu to select “Complete the Task” then this task is modified as gray color and stripe line over the all the statements (showable labels). • Search task by name in the listview.

Create an app for Manage Crud Operation using Sqflite

# Module 6

## Flutter

### Advance App Development

Create application which perform registration, login and logout using for firebase authentication

Apply if user already logged it call dashboard screen (manage session)

Use FirebaseFirestore concept

Fetch data from api using of http and display on listview.builder

