Flutter Assignments
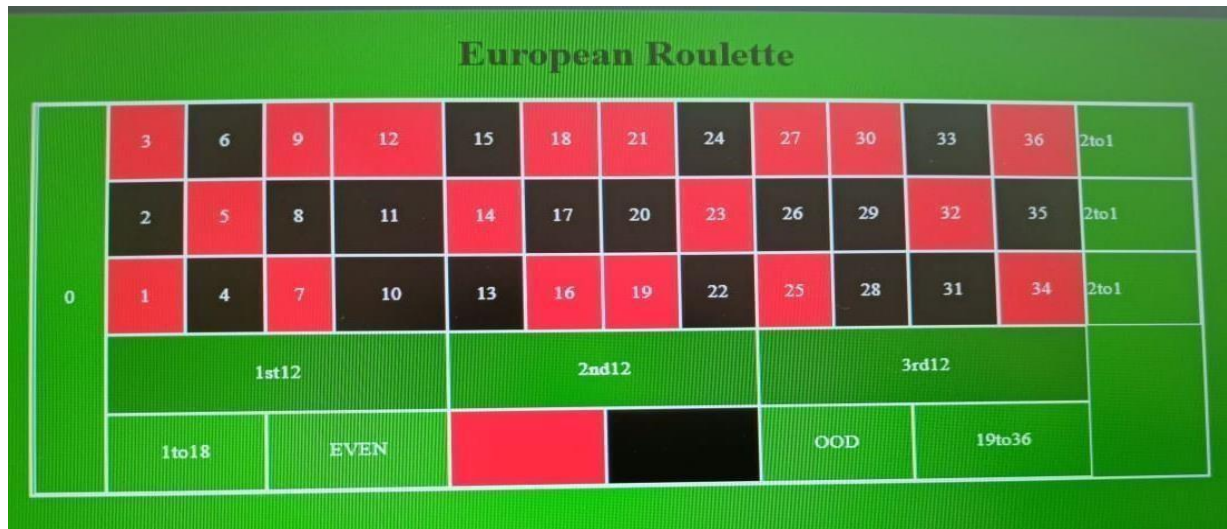## Software EngineeringAssignment

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

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
0	1	4	7	10	13	16	19	22	25	28	31	34	2to1

| 1st12 | 2nd12 | 3rd12 |

| 1to18 | EVEN | | | OOD | 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   Select ▼   * First Name

Middle Name   * Last Name

* Resident Status   Select ▼   * Country   Select ▼

* Email-Id   * Mobile Number

Account Particulars

* 15 Digit Account No   * Nick Name

* Fund Transfer   Select ▼

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.

submit   Reset

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 = a2

5. Find Area of Cube formula : a = 6a2
6. Find area of Triangle Formula : A = 1/2 × b × h
7. Find area of Rectangle Formula : A=wl
8. Find circumference of Rectangle formula : C = 4 * a
9. Find circumference of Triangle formula : 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 3rd variable and without using 3rd 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 >=65 and Marks in Phy >=55 and Marks in Chem>=50 and Total in all three subject >=190 or Total in Maths and Physics >=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 >=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 andthe 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 calculateits Gross salary according to following:
Basic Salary <= 10000 : HRA = 20%, DA = 80%
Basic Salary <= 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

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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: -
   1562Max 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
Loop13.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 + ... + n

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

26. (1)+ (1+2) + (1+2+3) + (1+2+3+4) + ... + (1+2+3+4+...+n)

27. 1/2 - 2/3 + 3/4 - 4/5 + 5/6............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 ordescending order as per user's choice

6. WAP to make addition, Subtraction and multiplication of two matrix using2-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 notWrite a program of structure employee that provides the following
   a. information -print and display empno, empname, addressandage
   b. Write a program of structure for five employee that provides the following information -print and displayempno, empname, address andage
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 forloop 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 oddusing 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 libraryfunctions.
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 libraryfunctions.
6. Write a program in C to count the total number of alphabets, digits and specialcharacters 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 astring.

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 withuppercase and vice versa.

12. Write a program in C to find the number of times a given word 'is' appears inthe 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 usinginline function

2. Write a program of Addition, Subtraction, Division, Multiplication usingconstructor.

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 triangleusing Function Overloading
    Rectangle: Area * breadth
    Triangle: ½ *Area*
    breadthCircle: Pi * Area
    *Area

12. Write a program to swap the two numbers using friend functionwithout using third variable
13. Write a program to find the max number from given two numbersusing friend function

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- **Topics Covered**

Templates

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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

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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?

SQL Queries

1. Create Table Name : Student and Exam

Primary Key

Foreign Key

Student

Rollno	Name	Branch
1	Jay	Computer Science
2	Suhani	Electronic and Com
3	Kriti	Electronic and Com

Exam

Rollno	S_code	Marks	P_code
1	CS11	50	CS
1	CS12	60	CS
2	EC101	66	EC
2	EC102	70	EC
3	EC101	45	EC
3	EC102	50	EC
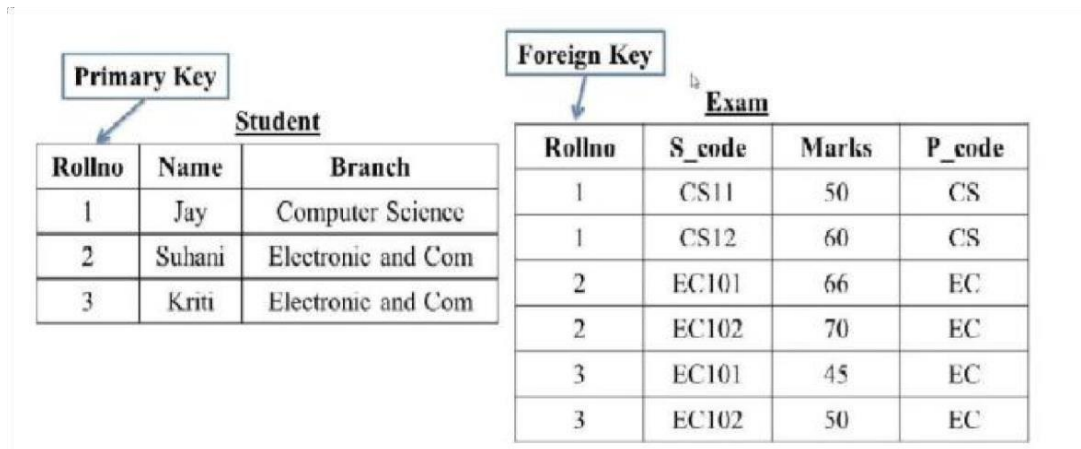
2. Create table given below: Employee and IncentiveTable

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. salaryascending?
9. Select first_name, incentive amount from employee and incentives table forthose employees who have incentives and incentive amount greater than3000
10. Create After Insert trigger on Employee table which insert records inviewtable

11. Create table given below: Salesperson and Customer

TABLE-1

TABLE NAME- SALSEPERSON

(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

table13.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

valuesshould be excluded).

17. All customers excluding those with rating <= 100 unless they are locatedinRome

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_priceas '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 byuser.

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`
			`123`
			`1234`
			`1 2 3 4 5`

`1`
`2 2`
`333`
`4444`
`55555`
	`1`
	`23`
	`456`
	`7 8 9 10`
	`11 12 13 14 15`
		`1`
		`01`
		`101`
		`1010`
		`10101`
			`1`
			`4 4`
			`999`
			`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
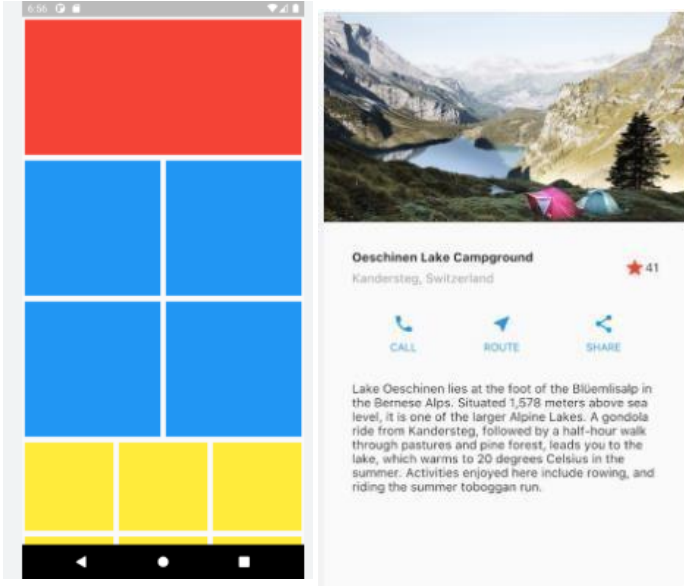
2. Create an application to take input number from user and print its reverse number in TextField

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 increate 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
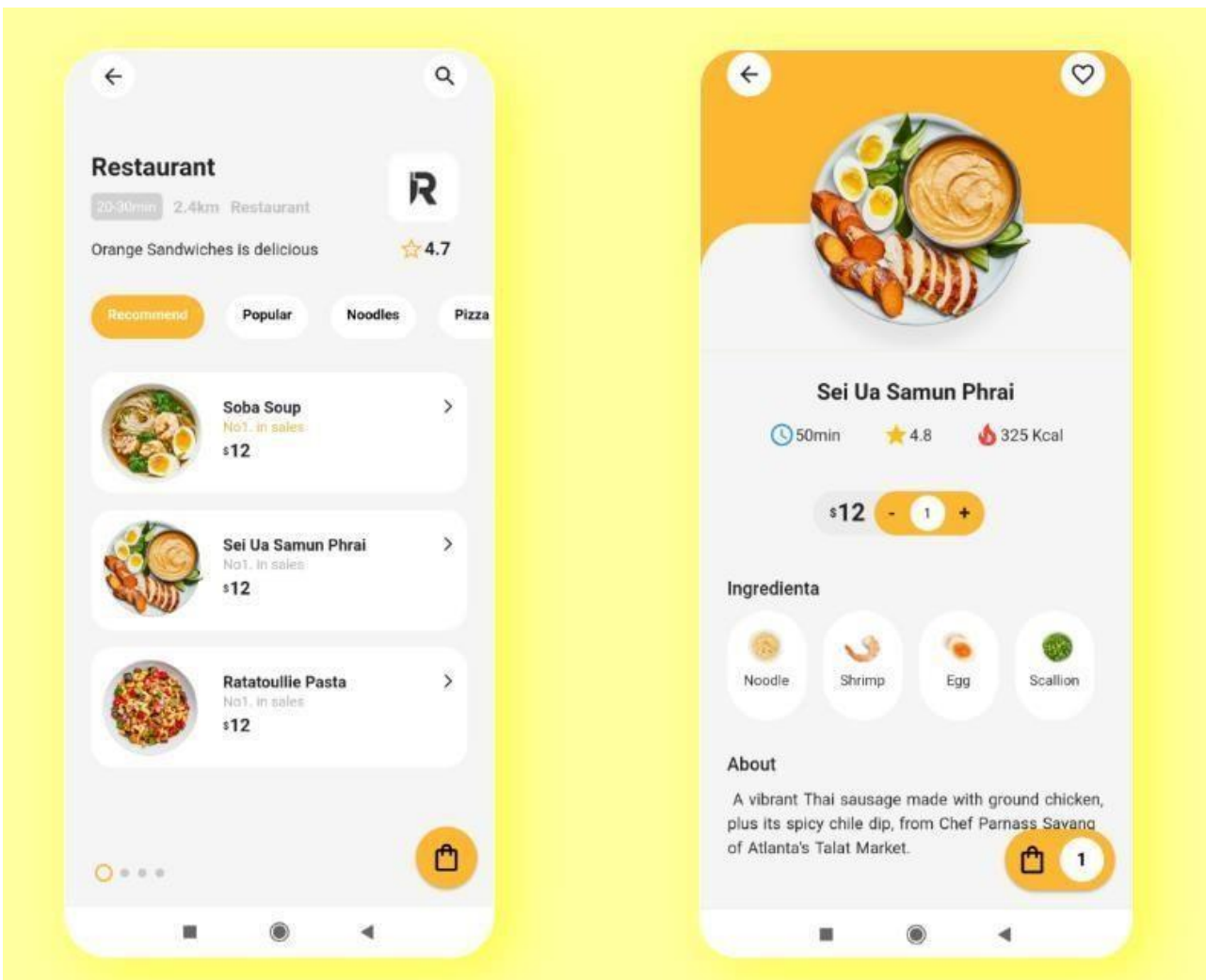
Module 4

Flutter – Advance

UI Designing and Development
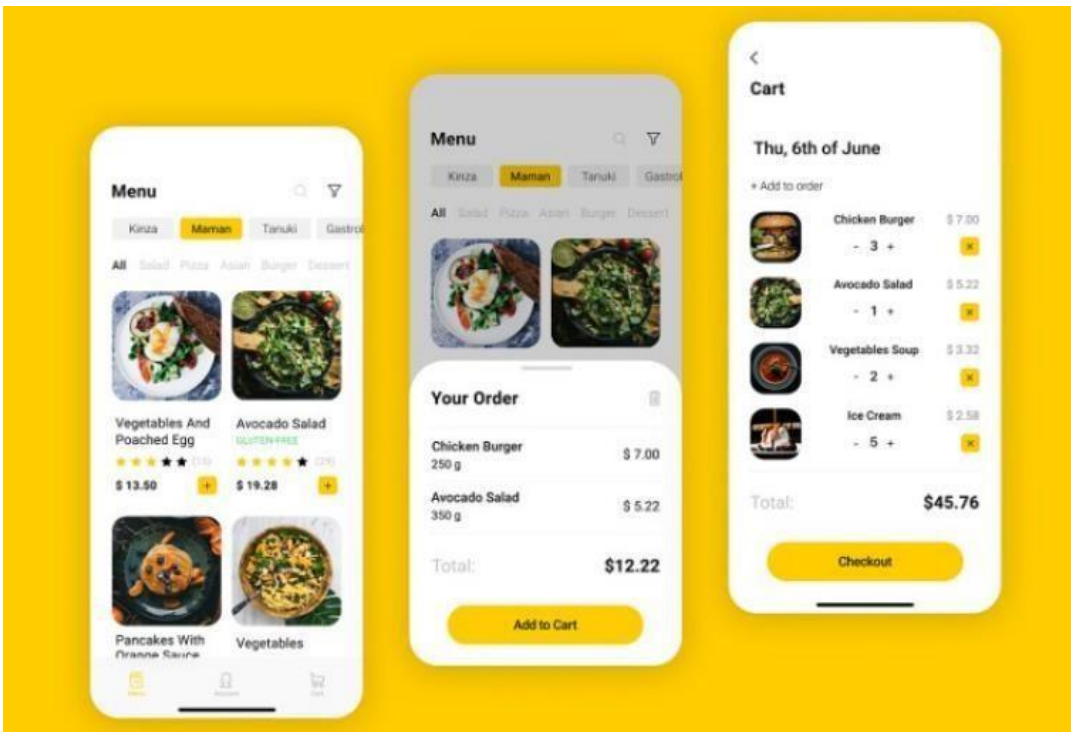
13. Create custom toolbar as per given below design Create toolbar with spinner and search functionality

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 urllauncher, Send Sms via urllauncher

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 an 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