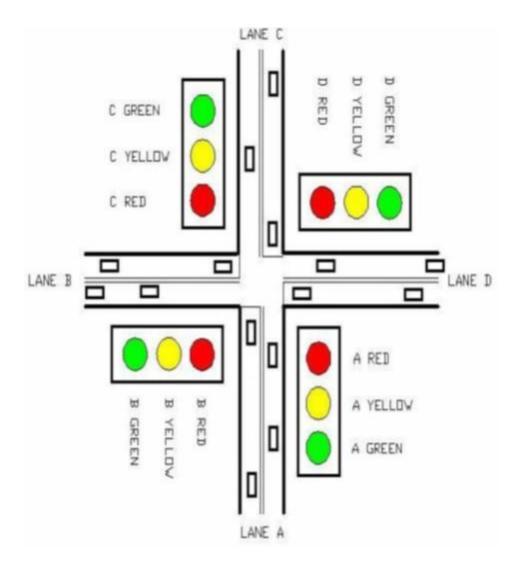
1. Design 4 Road Junction Traffic lights prototype using LabVIEW



- 1. Write a program to pass two way traffic from lane A to lane C and lane C to lane A, using flat sequence.
- 2. Write a program to pass two way traffic from lane B to lane D and lane D to lane B, using flat sequence.
- 3. Write a program to pass traffic from lane A to lane C as case-I and then from lane D to lane B as case –II , assuming roads are one way.

2. Design smart home (Remote Controlled)prototype Using LabVIEW

- 1. Design VI of 'Air Conditioner control system' incorporated in Smart Home prototype developed using LabVIEW.
- 2. Design VI to add or delete electronic home appliances to the Smart Home Prototype developed using LabVIEW.
- 3. Design VI for controlling the 'Music System' incorporated in Smart Home Prototype developed using LabVIEW.

3. Online Movie Booking system

- 1. By the help of case structure, book the movie ticket and show the seats are vacant or seats are filled?
- 2. By using visible/invisible property, show and hide the housefull/tickets available movie by online movie ticket
- 3. Arrange 50seats theaters and show the available and unavailable seats while clicking on the seat by using Boolean switches.

4. Analog clock with 5 different time zone

- 1. Design Analog clock with three different time zones using LabVIEW
- 2. Design Analog clock with two alarm sets using LabVIEW
- 3. Design Analog clock which displays current time using LabVIEW.

5. Design ATM WITH DATABASE using LabVIEW

- 1. Design a VI to create a data base of ATM card number and PIN using file I/O pallets
- 2. Design a VI to validate the ATM PIN using pre existing database of card number and PIN
- 3. Design a VI to extract account balance based on card number and PIN.

6. Design HOTEL MANAGEMENT System prototype using LabVIEW

- 1. Develop a VI to book the room for a single costumer and save details.
- 2. Design login page for hotel staff using LabVIEW.
- 3. Design room cancle status prototype using LabVIEW.

7. Speedometer and Tachometer

- 1. Design a VI to display a message "Low Speed", "Moderate Speed", "High Speed" when Speedometer reading is "Below 45km/hr", "Within the range of 45 to 100km/hr", "Above 100km/hr" respectively.
- 2. Design a VI to Control Speedometer and Tachometer using Boolean switches and update vehicle speed depending upon engine speed
- 3. Design a VI to update values of Tachometer and speedometer using gear system

8. Virtual Piano Prototype Using LabVIEW

- 1. Design a VI to get 3 different notes by pressing the key.
- 2. Design a VI to control the volume and octave of the piano.
- 3. Generate the sounds of each key by pressing the on-screen keys and display the sound signal waveform.

9. LEARNING MANGEMENT SYSTEM (MINI LMS)

- 1. Design separate Student login and faculty login for LMS using LabVIEW.
- 2. Design Prototype to check Syllabus for 2 different subjects using LabVIEW.
- 3. Design prototype to check attendance of student and define promotion, condonation and detention using LabVIEW.

10. Student Database for minimum 10 students

1. Design a VI of student database updation module (for eg. Updating new phone numbers, addresses) after logging in via user ID password by an administrator only.

- 2.Design a VI of student database maintain ence module in spreadsheet after logging in via user id password by an administrator only.
- 3.Design a VI of student database display module for displaying details of selected student in front panel chosen by the user after logging in via user id password.

11. Design online banking prototype using LABVIEW

- 1. Build a VI to deposit money into an account by using LABVIEW. It should also show the total balance available in an account.
- 2. Build a VI to design online banking interface (i.e. User ID and Password) to check the balance available in the account by using LABVIEW. If User ID or Password is wrong "unauthorized user" message should display by using POP UP window.
- 3. Build a VI to design banking interface for user in such a way that, if user enters an account number a system should show details of that corresponding account holder. Details include Name of account holder, Age, City of residence, Country of residence only. (Note: minimum 5 account holder should be present in the database.)

12. Full Functioning of AC with water usage from tank

- 1. Design Temperature Controlling Functionality of an AC using LABVIEW.
- 2. Design a Remote Control for an AC to (a) Switch ON and OFF; (b) Switch the Blower; (c) Switch Different Modes using LABVIEW.
- 3. Design the Swing Operation of an AC using LABVIEW.

13. Digital Clock

- Q.1 Design a program with for loop to execute a counter starting from 0 to 7.
- Q.2 Design a seven segment display to display from 2 to 9 and set a LED which will glow when 5 is displayed.
- Q.3 Design a program to display all the even numbers from 1 to 20 in seven segment.

14. CAR SECURITY SYSTEM

- 1. Design VI to start engine of car prototype linked with seat belt and 4 doors lock.
- 2. Design VI to control the max speed of car based on highway, side roads and market.
- 3. Design VI to take off the seat belt only when engine will be off after stopping car with message.

15. Design ELEVATOR (4 floors)

- 1. Design labview program to call lift from ground floor to first floor with floor no. display.
- 2. Design labview program to call lift from first floor to ground floor with floor no display.
- 3. Design Labview program to open and close the door of lift with display.

16. SUPER MARKET shoping Structure

- 1. Design Labview program to buy n number of chocolates with total amount display.
- 2. Design Labview program to generate bill for purchase and save it.
- 3. Design Labview program for payment of purchase with cash/ card options.

17. Automatic cat parking system for 10 cars

- 1. A car parking system system has slots of 3 different sizes(size1 size 2 and size3). Alto can fit into any of the three sizes. honda city fits into only size 2 and size 3 parkings. Innova crysta fits into only size 3. Design an auto matic parking system such that the sutable car only enters the parking if the particular slot is free. Other wise display no parking available.
- 2.Design a car parking counting and billing system depending upon the time of stay and add fine charges if the time exceed.

3. There are two floors in a building having two slots in each floor. Only after filling the lower floor cars are allowed to access the upper floors. Design VI to display in which floor the car is given the parking slot.

18. Microwave oven

- 1. Design VI of microwave with remote control only.
- 2. Design VI of Microwave with manual operations only.
- 3. Design VI of Microwave with timer and temperature display.

19. Automatic Water control in building

- 1. Design VI to pass the water from one tank to another tank.
- 2. Design VI to fill water in 4 tanks as per your requirement. If you select tank 3 only tank 3 should be filled.
- 3. Design VI to control the water level of minimum 2 tanks.

20. Automatic Washing Machine

- 1. Design remote controlled Washing machine with timing control for washing or drying option.
- 2. Design manually controlled Washing machine with timing control for washing or drying option.
- 3. Design VI for Washing machine with alarm indication after the completion of the task.

21. Digital Vending Machine

- 1. Design vending machine for 2 different cold drinks with different price with with exact amount pay option. if you will pay exact amount of note then only process will be completed.
- 2. Design vending machine for 2 different chocolate with different price with card payment option.
- 3. Design Vending machine for 2 different snacks with pay amount and return change option.

22. Building College Details

- 1. Design VI to see the course offered by 3 different departments.
- 2. Design VI to see the syllabus of 3 different subject.
- 3. Design VI to see the list of faculties for 4 departments.

23. Snake and Ladder

- 1. Design VI of Snake and ladder game for 2 payers with 2 sanke 2 ladder.
- 2. Design VI of Snake and ladder game for 2 payers with 3 sanke 1 ladder.
- 3. Design VI of Snake and ladder game for 2 payers with 1 sanke 3 ladder.

Questions will be same for both Vending Machine Project

Note: Tell students to at least complete Write up and lab evaluation part nicely with whatever they know but be very Strict about Project Evaluation.