OOPS PROJECTS

1) The ATM Banking System is a banking Application which is to be developed to perform different banking services through the ATM. The functions to be included are the regular transactions like cash deposits, cash withdrawals, balance enquiry, balance statements, savings account, change PIN number and so on. Develop a GUI program for the described project.
(Create separate modules for each operation)

2) The Railway ticket booking System must consist of passenger details as inputs, it should contain 10 trains and 10 stations, the passenger must be able to select his starting point and the destination and along with choosing of the train. Express and Superfast are the two categories of trains available which consist of both AC and Non-AC coaches. Develop a GUI program for this project and store the name, age, gender, amount paid, name of the train and seat number in a file.

3) You are a shop owner and want to automate the process of billing system. Develop a GUI program such that it should contain different categories of items in the shop and each category should display a drop-down list of the items present such that on selecting a particular item the customer wants to purchase, it displays the item name, the discount on it and the final price of the item. Calculate the total bill and print it and then store it in a file.

4) Raj has a phone directory in which he will store his friends and family's phone numbers. He wants to transfer all the information into a file and retrieve the details in an easy manner. The directory contains the phone numbers and name of the person. He wants to add a new person's details with phone number. So, help him by writing a Java program which retrieves the details by searching/adding the person's name and vice versa. Use GUI.

5) The Election Voting System has become the main part of the society now a days. The government planned to implement a digitalized system where the applet keeps track of all the candidates according to their region they are participating. The main objective of this applet is to keep track of the participants majority according to their region and it has to display their details along with the votes they obtained.

   Main: You have to design a frame that has 2 halves.
   Module 1(1ˢᵗ half): design a **GUI** that keeps track of the participants according to their region. (create square buttons for each participant and you have to insert their name

and party according to the region the belong to. So, the voters can vote for the participants according to their region by seeing those buttons.)

Module2(2ⁿᵈ half): design a **GUI** where the participant's name, region and their vote count should be displayed in each tab in any order and a final output tab containing the leading party with total votes.

→Include security features if required.

6) Travelling throughout the world is a dream for most of us. The main problem in regard to this is that currency conversion isn't understood by everyone and isn't easily accessible sometimes. So, design a GUI interface which should contain details like selection of two countries, rate of their currency at that moment and the converted amount. Store all this information in a file and display them on the screen.

7) The owner of a library wants to digitalize the process of library management, so help him in this process by writing a java program that stores the details(book id, book name, author, price) of books in a file, It should be able to add new books to file, Lend books to Readers and their details in order to lend books. The reader can search books by book name, book id. He wants to do this in proper and easy manner as he feels that compiler and terminal inputs are difficult and not easy to understand so, you have to use Graphical User Interface (GUI).

8) Kartish was the head of department for sports and games in a college. He wants to create an application for students to register for the sports they're interested in to participate without any extra paperwork. Help Kartish in making this possible by using GUI.
Events included: Basketball, Volleyball, Badminton, Tennis, Table tennis. Each game can have single or double participation if available.

9) Kamal and his friends have a huge collection of cars. So, they got an idea of renting their cars. In order to implement this, they need an interface for customers so that they can get a rental in a simple way without direct interaction. For this the customer should provide his Aadhar card, pan card and driving license. After confirmation of this information the customer must be able to view the menu of cars and choose any one of it for rental purpose.
Conditions: 1. The pan number should consist of 10 digits. First 5 digits and the last digit should consist of alphabets and the rest should be numbers.
2. Aadhar number should consist of 12 digits.
3.The Driving license should contain 15 digits in which first 2 digits should consist of alphabets and must match any of the Indian state codes.

10) Your friend is a manager of a Five-star hotel and has been asked by his hotel's stakeholders to digitalize the process of booking a stay in that hotel for the customers. Develop a GUI based program for your friend such that it takes in the details of the customer (name, age, gender, check-in date, check-out date, no of people and their preference of room). Verify all the details and display a confirmatory message on the screen and then store the details in a file.

11) The Principal of Delhi Public School wants to know about his faculty's knowledge of their respective subjects, so he has asked you to develop a GUI based program which should contain sections, the faculty list for that particular section and the student's feedback about that faculty. Store this data in a separate file such that each section has its own separate file from which he can retrieve the data anytime.

12) The Chairman of your hospital had come across an issue in the OP registration and had noticed that the process is too slow and time consuming as It is done manually. So, he has asked you to develop a GUI based program which should take in the patient details(name, age, gender) and should have an option of selecting the problem they're facing and should show the list of doctors in that field such that they can book an appointment at a time of their convenience. Display all these details on the screen and then store them in a file.

13) You are the Professor at a University. The students at the university are fond of Digital learning. You are required to teach your students different sorting techniques with stepwise execution and Compare the time complexities of the various techniques. Use GUI to display each step of the sorting process after taking in the numbers as input.

14) Lazio has a car manufacturing unit. They want their customers to have a car of their liking. Help them out by developing a GUI based program which should consist of the various available models, the different designs present, cost of each model and the delivery time for their choice of car.

15) You own a pet shop and want to develop an online portal for your customer's convenience. Use GUI to develop a program which should contain registration of their pet's details (name, breed, age, color, weight, unique features, owner's name and their locality) and also should contain missing pet's complaints (include pet details and their pictures). Also show them the details of certain pets rescued by the NGO's.

16) You are bibliophile and want to ease the process of reading books/documents present in the internet or your system. Use GUI to develop a program such that it opens a document from your local disk, goes to a page when we provide the page number and can search and highlight a word of our liking. It should also store all the highlighted words into a file.

17) Your Head of the Department has asked you to develop a GUI based program for the process of admission into the university. It should display a frame for the student to select based on what criteria they're joining the university (EAMCET, IPE, MAINS, ADVANCED) and should take in their marks in that particular exam thereby displaying the branches available as per the marks. Display the concession of fee and final fee in accordance to their marks. In another frame they should input their details (Name, Age, Gender, Father's details, Mother's details and mode of payment). Display all this information on the screen and then store it in a file.

18) You are working in a movie theatre and have been asked by your superiors to develop a GUI based program to ease the process of ticket booking. It should display the movies present, show timings of each movie, availability of seats, should take in the customer details (name, number of tickets, phone number) and should be able to book and cancel tickets. It should also display the booking confirmation on the screen and store it in a file.

19) You are an owner of a gaming website and you want that page to be page user-friendly. So, you have to write a GUI program which takes data such as Type of game, Title of the game and specifications required. This program can add or delete games and Display Games according to the specifications provided by the user.

20) You are going to start a new business on cab booking. Develop a GUI based program such that it should take in the passenger details for login (Name, Address, Phone number, Email). Users are asked to provide the number of passengers each time and are then provided with the list of available cars at that moment of time. They can choose a car of their liking and are displayed confirmatory message. Store all these details into a file.

21) You are working in the banking sector and have been asked by your manager to develop a GUI based program for the customers so that it contains every customers details(name, phone number, account number, Pan card number) and also shows them their previous transactions details and balance enquiries. It should also an Apply loan facility for easier access.

22) You are working in a consultancy firm and have been asked to develop a GUI based program which takes in details of the candidate (Name, Age, Educational Qualifications, Work Experience, Skills, Languages known and hobbies) and displays various jobs that are suitable to them basing on the requirements. It should also send their CV's to the companies they've applied for and should display a message if they've been called for an interview by any of the companies.

23) You own a garage and want to develop a GUI based program for the services you're offering to help the customer's in every possible way. It should contain separate buttons for 2,3,4 wheelers and also include an option of premium membership which gives the customer additional discount. Display the cost of servicing for each type of vehicle including the discounts/offers when chosen on the screen and store them in a file.

24) You are a part of an event managing company and are asked to develop a GUI based program to help the customers book their events. It should take in their details (name, type of event, expected number of guests, date, time) as inputs and then should display the various locations in accordance with the event type and the number of people attending it. It should also contain decorations, food stalls and beverages to be present. Also, should contain an option of providing Photographer for the event. It should then display the rough estimate to the customer and store the data in a file.

25) Implement a GUI based program which looks like messenger which takes username and password as login credentials. After logging in, there should be list of 5 friends and each friend has a separate chat which is stored as chat history. He can send text, images and videos in the chat. There is also an option of creating a new account.

26) Implement a GUI based java program which should have a login page and should take in ID and password as login credentials. Then it should display all the notes that were previously saved by the user. It should give him the option to delete previous notes and also add new notes.

27) Implement a GUI based program for conducting a survey. It should have 3 options of the various categories for the survey to be conducted on: AC, Mobile Phone and Laptop. Each of the options should give out 5 different models each and the user should be given an option of choosing the product as good/bad. Rank the different products accordingly after considering the opinions of 5 users.

28) You are asked to develop a quiz exam which should take ID.no and name as input and should have an enter button. The quiz should of consist of 5 questions whose answers should be saved in the backend. Make sure that only one question is displayed at a time on the screen. Add previous and next buttons for every question. Add a submit button for the last question. After clicking the submit button, display your score on the screen and store all the details in a file.