



### ଶ୍ରୀ ଅନୁମତି କାହାଙ୍କାଳୀ

At the outset, I am offering gratitude to my guide, who gave me great insight into what had to be done, and for their encouragement, without which it couldn't have been possible to complete this project.

I am grateful to my friends for helping me prepare this project and for their valuable suggestions.

I would also like to thank every one of the organization who helped me in preparing this project and who guided me and gave me many useful suggestions by time to time in resolving difficulties.

I would like to express my deep sense of gratitude to the **Loan Management System at the SBI Branch in Gumla, Jharkhand**, for providing me with the opportunity to undertake this valuable project within their esteemed organization.

I hope that my efforts on the project will fully satisfy experts who will examine this project. And I also pray to god to grant me success and brilliance in the field of computer science. This is my first opportunity through MU, and I am very grateful for this golden occasion in my life. And I am eager to work on various projects in future.

Thanks to all.

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# PROJECT REPORT



# TITLE OF THE PROJECT

**SYSTEM FOR LOAN MANAGEMENT FOR  
THE BRANCH OF S.B.I.,  
(GUMLA JHARKHAND)**



## **INTRODUCTION OF THE PROJECT**

The "STATE BANK OF INDIA" is an organization that deals with different works like Loan, Funds, Saving money etc. The Head office of S.B.I is in Mumbai and the Regional offices are across the country and one of them is at ANDRA, Ranchi (Jharkhand)

The STATE BANK OF INDIA, GUMLA(JHARKHAND) (AGRICULTURAL BUSSINESS BRANCH), has provided me this software, entitled "Service Provided by State Bank Of India" to it's customer. This service of State Bank Of India is based on Loan System. I am using Java & Oracle to develop this software.

A loan is a long-term process if done manually. In this process, the applicant first inquires about a particular loan and its process, then accepts the loan agreement. After that, the applicant submits a proposal form and waits for a long time for the loan to be sanctioned. The entire process takes a considerable amount of time, and a major issue is the wastage of both money and manpower. From this perspective, we are developing an application for the bank (S.B.I.) that will enable bank employees to complete their tasks more efficiently, with less time and fewer resources, compared to manual work.

Through this software, the utilization of manpower will be reduced, and the entire loan system database will be maintained with easy operation.

This system will give the detail information of organization i.e. Loan type, Preview of forms, Related procedures and Terms & conditions.

This project system is a complete procedure for managing loans. In the future, we can add various features as per the requirements of the Loan Department, such as staff/member details and the organizational structure of other departments. It will provide complete details about the applicant, their account, nominations, guarantors, agreements, loan forms, return processes, and other facilities. This will allow users to easily decide whether to apply for a loan in an academic environment. Additionally, the system will generate various reports related to the project.



## **OBJECTIVE OF THE PROJECT**

This system is one of the important parts of State Bank of India, which maintains the accounts, forms and entire loan process of the bank. This system will keep track of all the activities and provide important reports related to loan agreements.

It will provide the following details : --

Applicant details.

Applicant working details.

Guarantor details.

Nominees detail.

Account details.

Loan details.

Agreement details.

Forms details.

Sanction details.

Repayment details.

Security details.



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

This system is a common comprehensive system that will be developed with the concept that it will cover most of the accounts function of and their management.

Through this system, the user can maintain and provide services to customers of the State Bank of India under a streamlined process. When applying for a loan from the bank, users often face many problems. The first issue with manual work is that application files move from table to table, which consumes a lot of time and manpower. In the computer era, we should aim to complete tasks as quickly as possible. By automating this manual work, the utilization of manpower will be reduced, and maintaining the process will become much easier through the database.



## TOOLS/ENVIRONMENT USED

Oracle was founded in 1977 as software development Laboratories by Larry Ellison, Bob Minor, and Ed Oates, There were no commercial relational database products. The company which was later renamed Oracle, set out to build a RDBMS as a commercial product ,and was the first to reach the market.

Oracle is an object-relational database. A relational database is an extremely simple way of thinking about and managing the data used in business. It is nothing more than a collection of tables. But the relational approach can be sophisticated and powerful enough for even the most complex for business.

An object-relational database supports all the features of a relational database while also supporting object -oriented concepts and features. Basically Oracle was created to run identically on virtually any kind of computer. Thus it does not matter which manufacturer sold you your equipments; oracle works on it. These features all contributed directly to the profound success of the product.

Where Oracle is used, it has radically improved the understanding between the two campus has increased their knowledge of one another, and has begun to normalize the relations between them. This has also produced superior application and end results.

## TOOLS, PLATFORM & LANGUAGE TO BE USED

### TOOLS:

- FRONT-END : JAVA
- BACK-END : ORACLE8i

### PLATFORM:

- WINDOWS NT 4.0 / WINDOWS 98/XP.



## **HARDWARE AND SOFTWARE ENVIRONMENT**

### **HARDWARE ENVIRONMENT:**

- PROCESSOR : PIV
- RAM : 256 MB
- STORAGE CAPACITY : 40 GB
- DRIVES : 52X CD  
1.44 MB FDD

### **SOFTWARE ENVIRONMENT:**

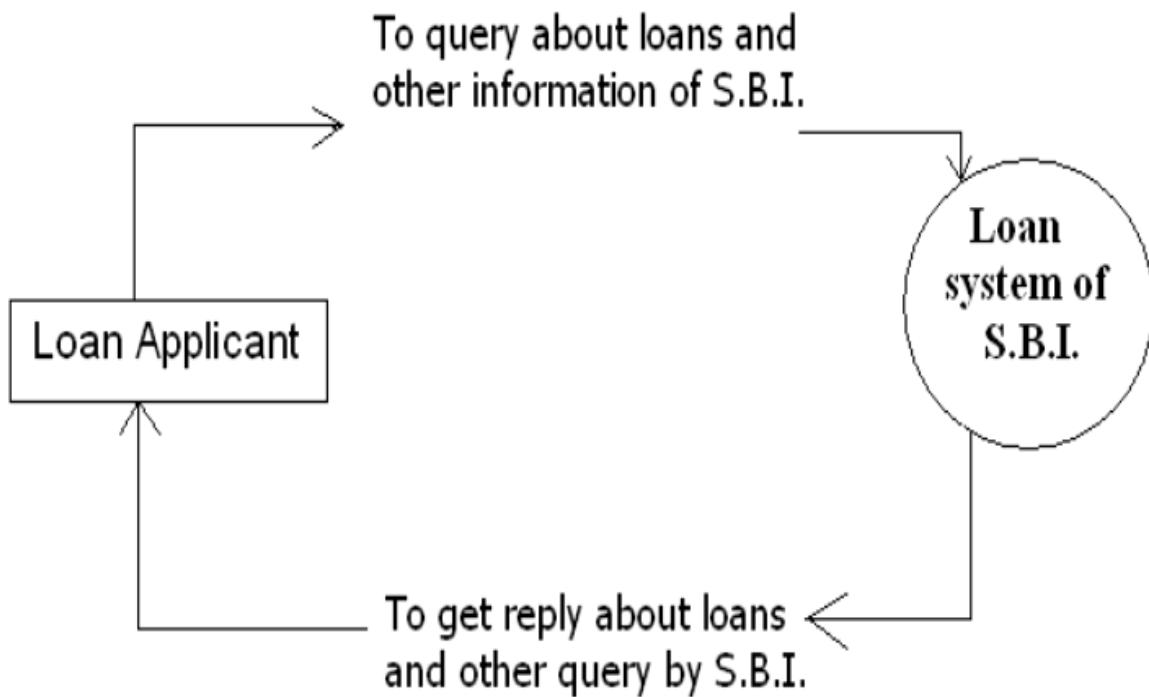
- OPERATING SYSTEM : WINDOWS NT 4.0, WINDOWS 98  
WINDOWS XP
- RDBMS : ORACLE8.0/8i

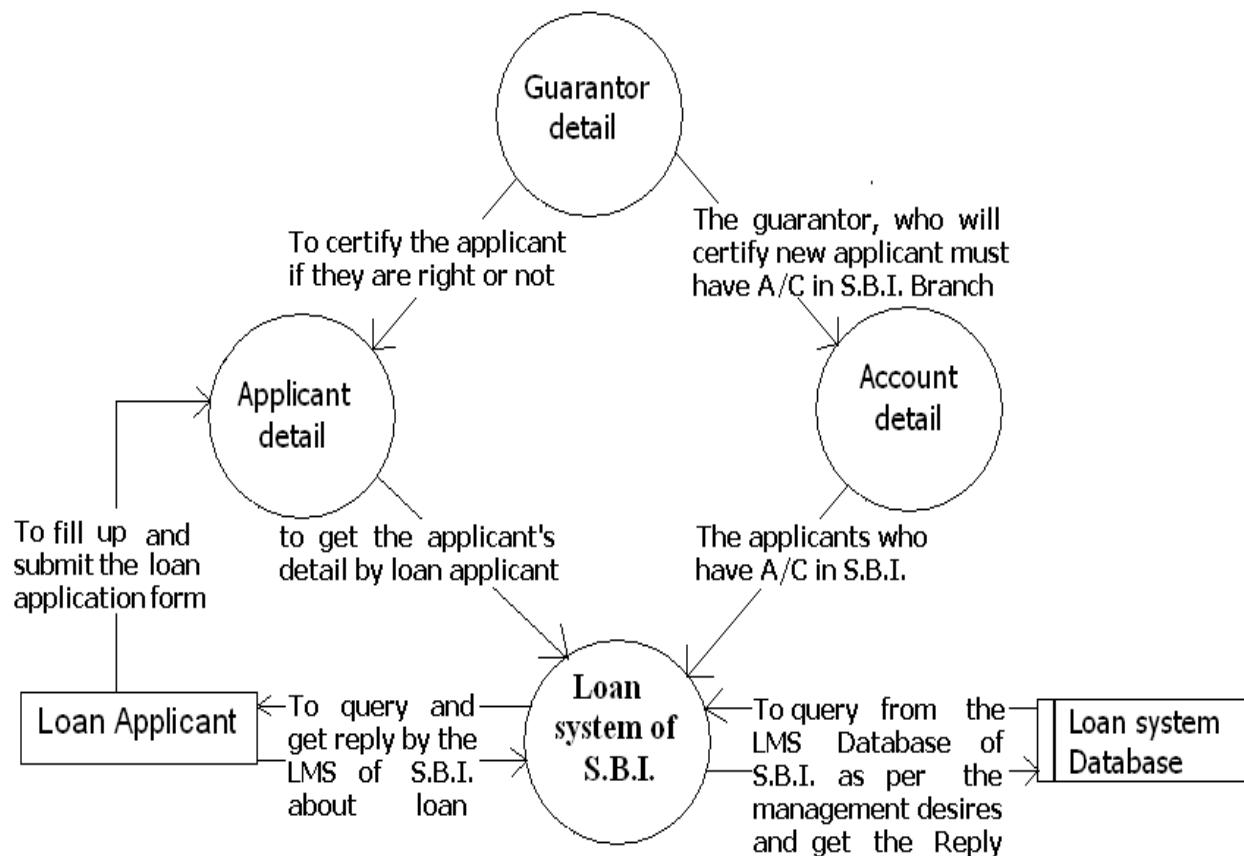


## ANALYSIS DOCUMENT

### DATA FLOW DIAGRAM

### CONTEXT FREE DIAGRAM

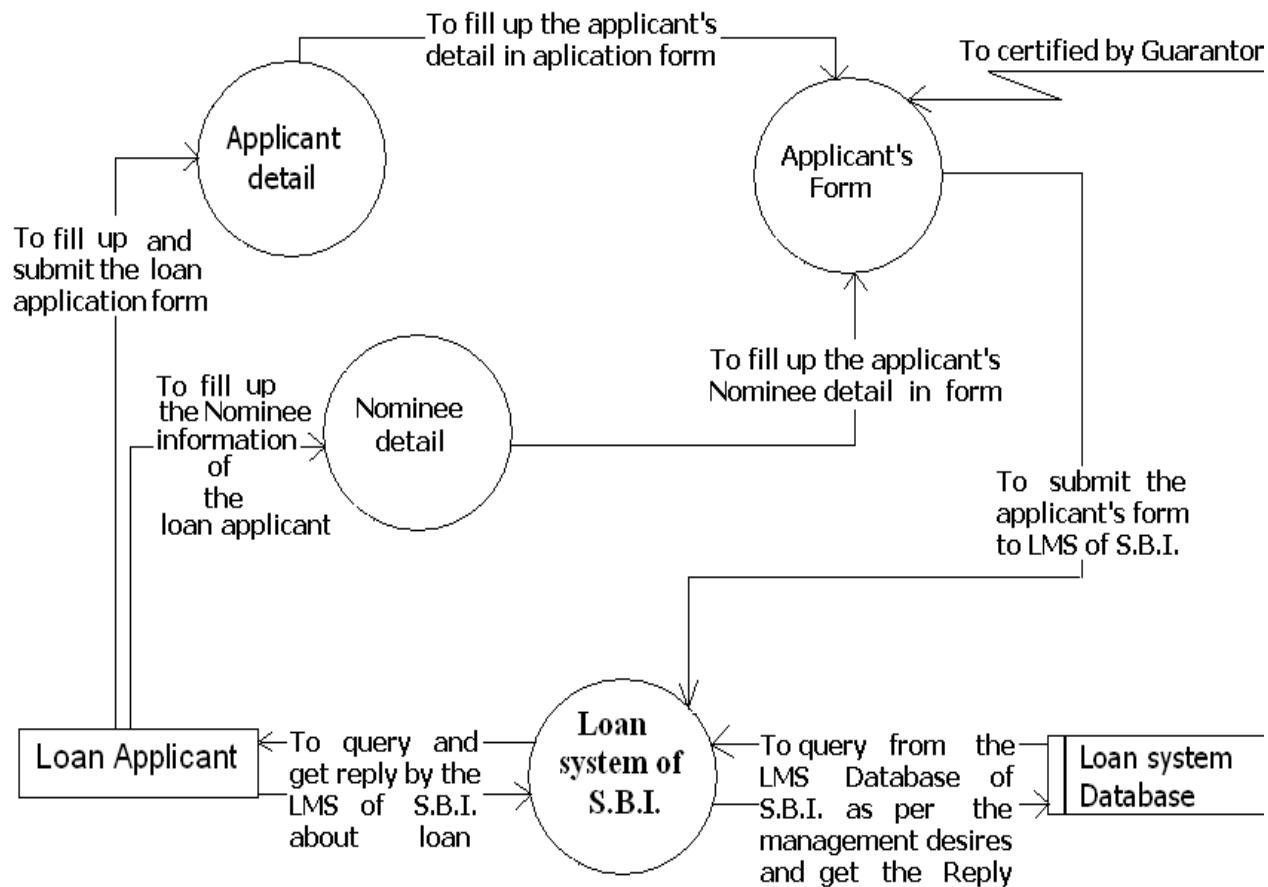




**1 - LEVEL (DFDs)**



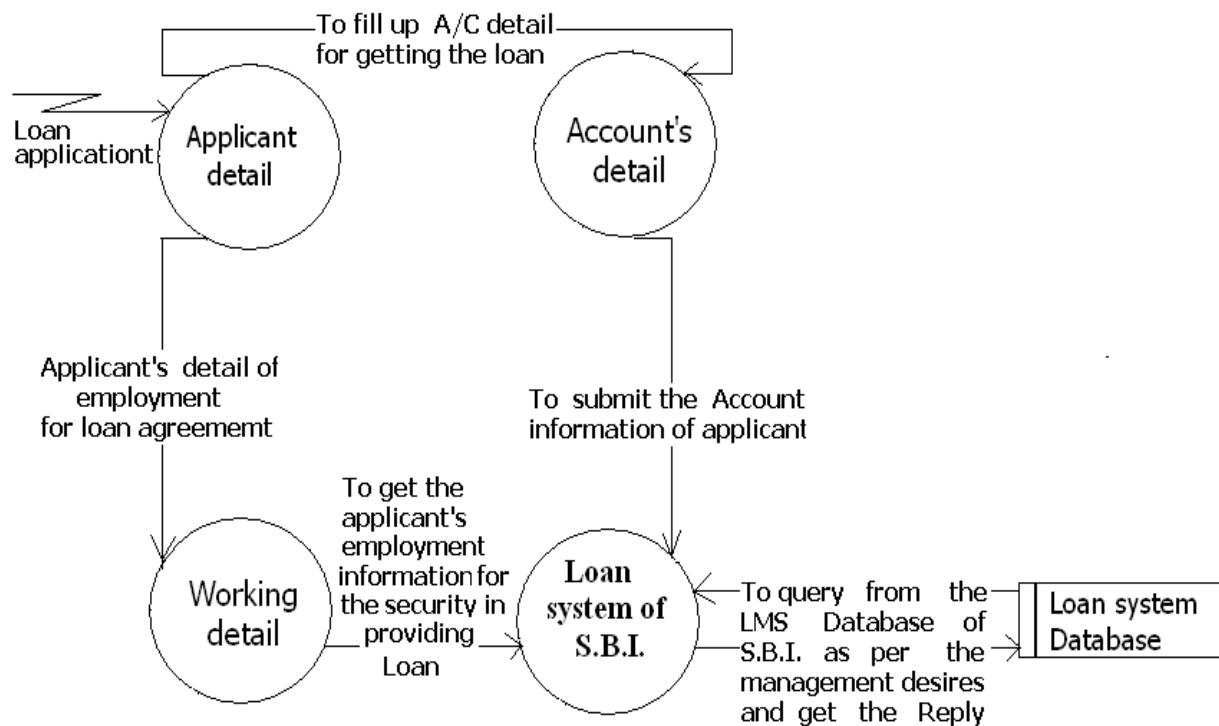
## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)



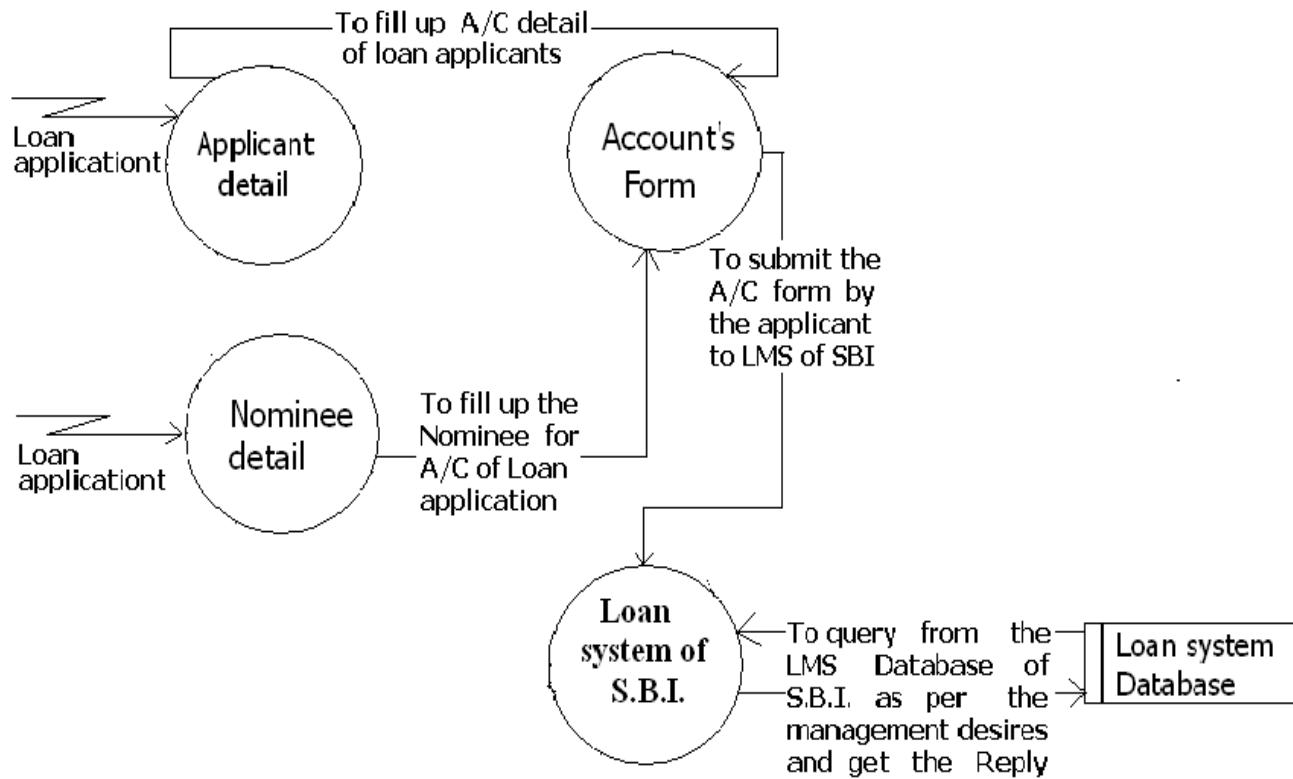
### 2 – LEVEL (DFDs)



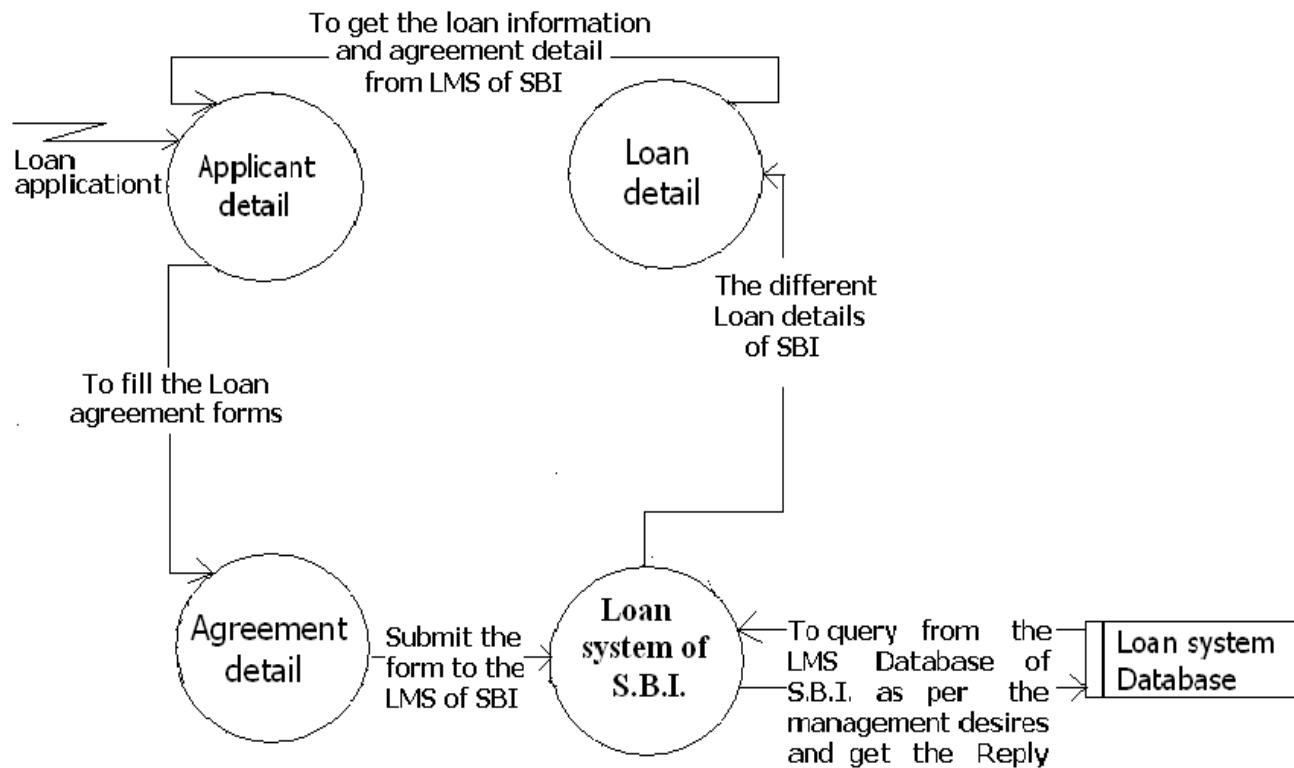
## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)



### 3 – LEVEL (DFDs)



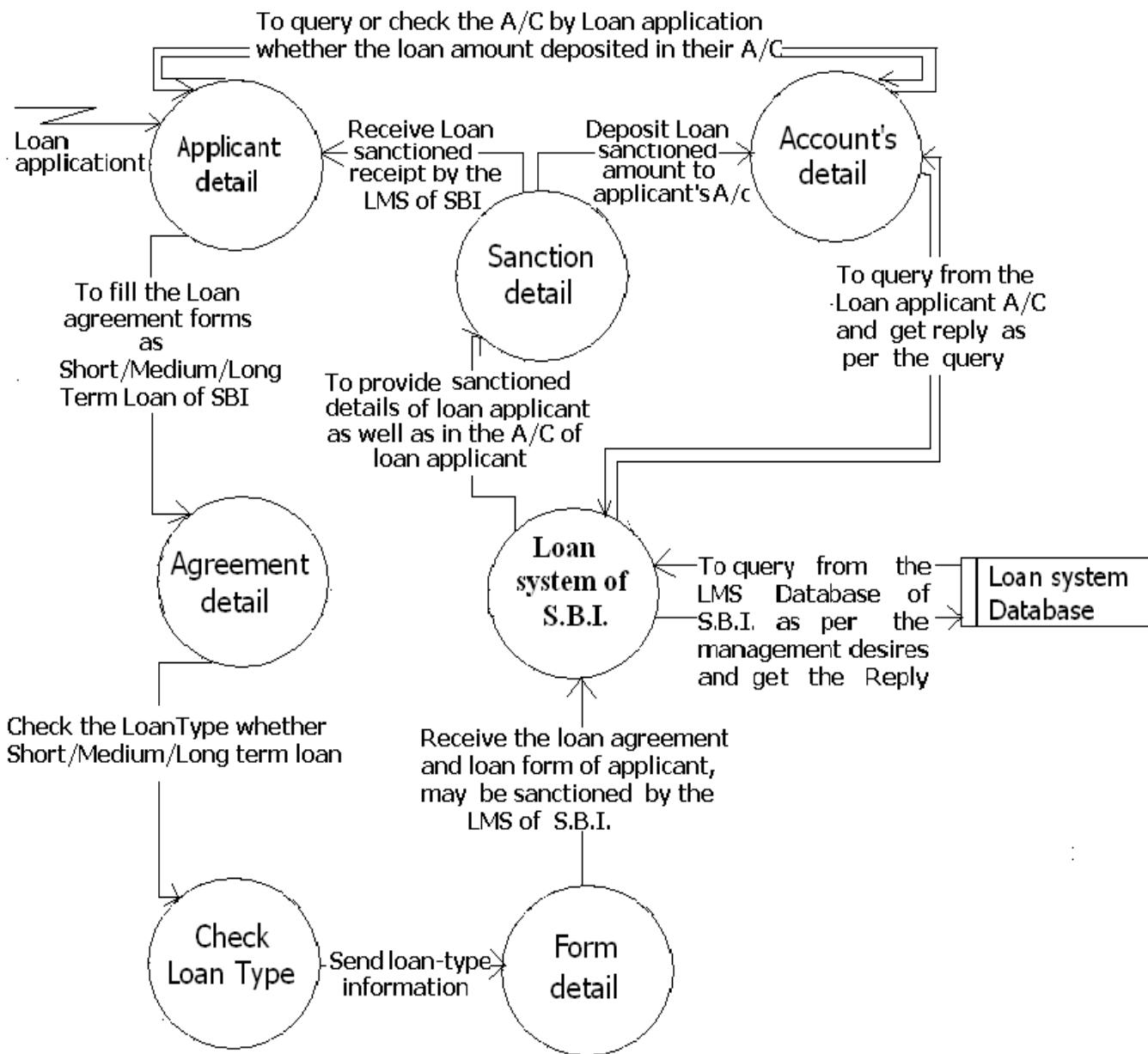
4 – LEVEL (DFDs)



5 – LEVEL (DFDs)



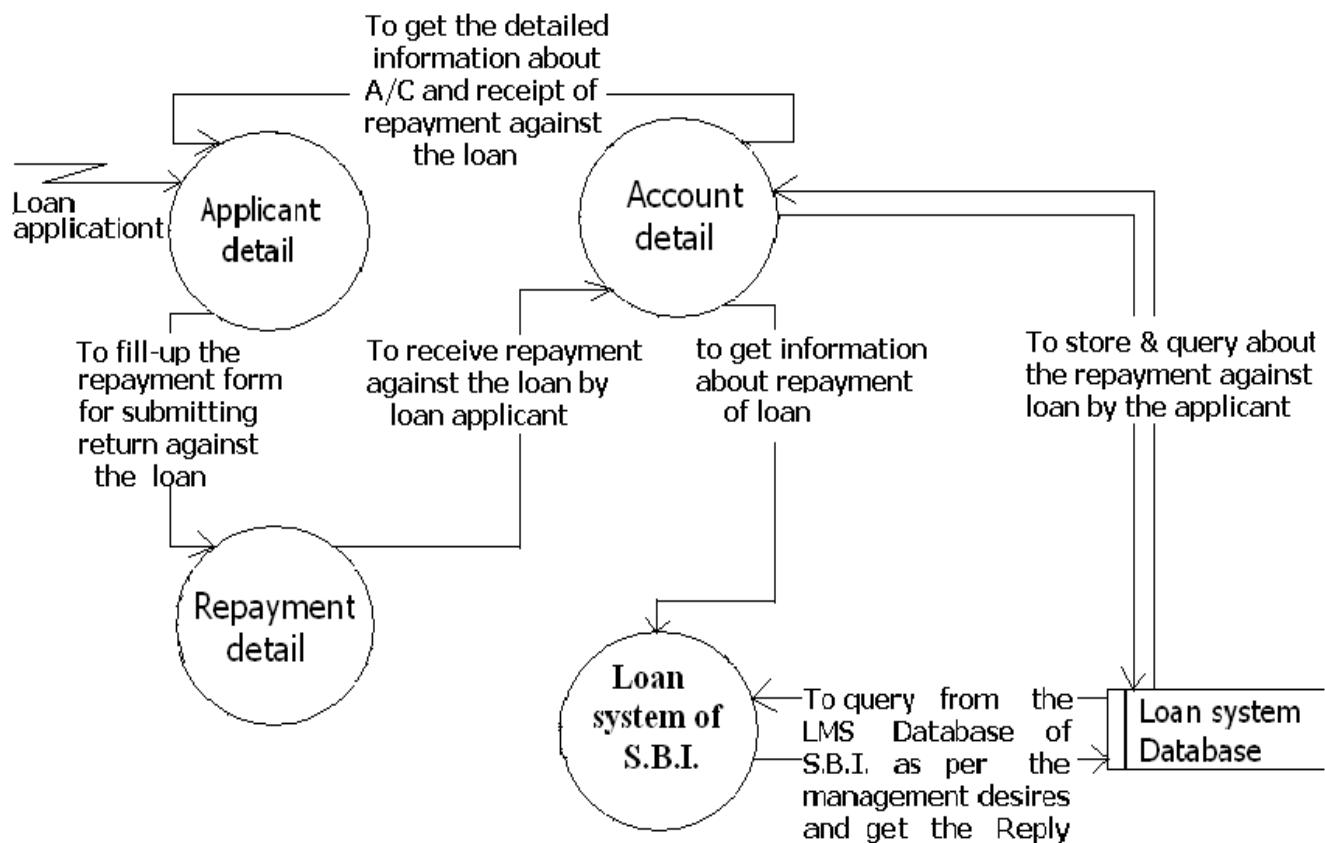
## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)



### 6 – LEVEL (DFDs)



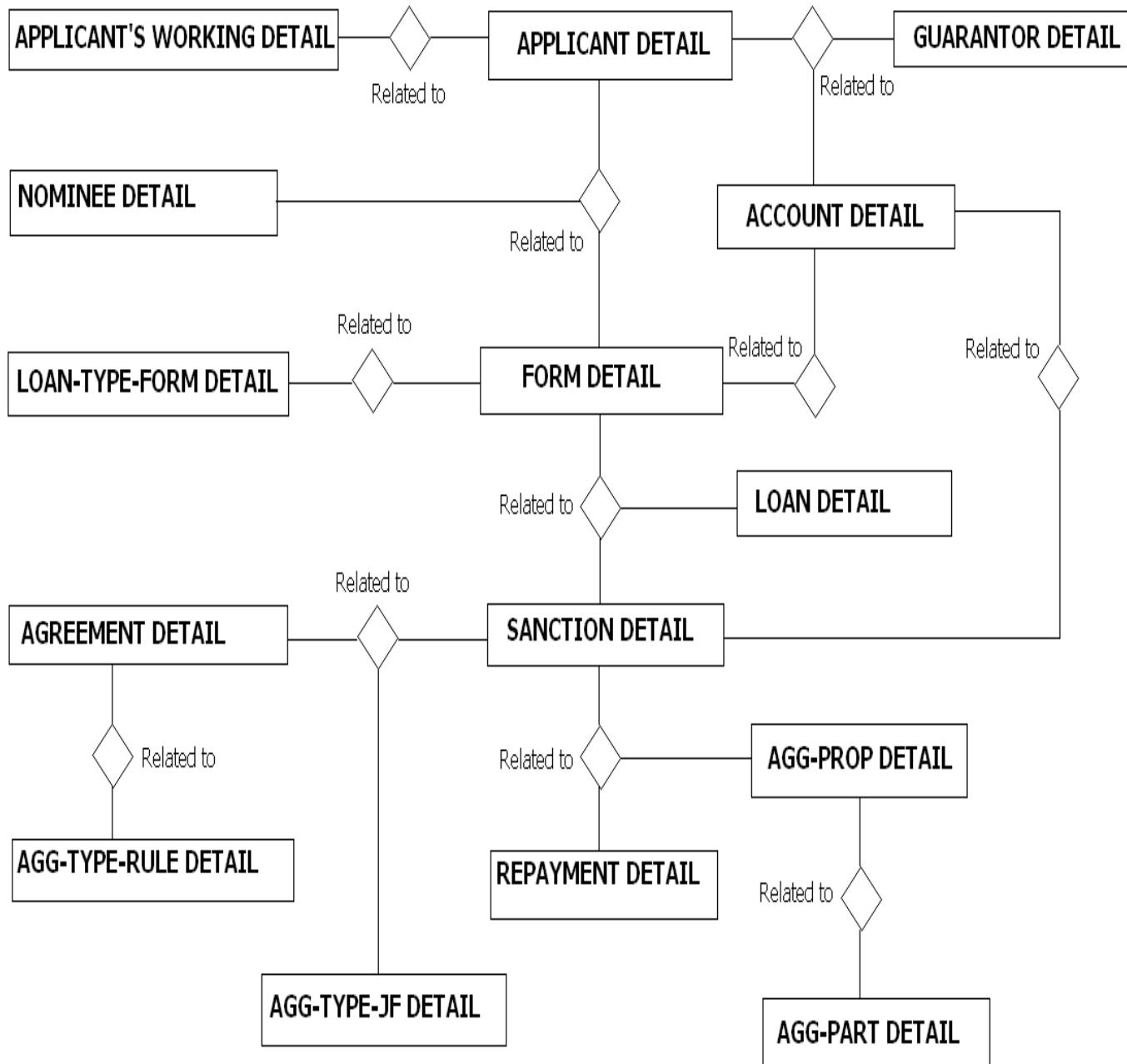
## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)



### 7 – LEVEL (DFDs)



## E -R Diagram :





## **PROCESS LOGIC OF EACH MODULES**

### **Loan Detail Modules:-**

Step1> There are several label and according to label there are text box on the form.

Step2>There will be checks in each text box according to created table.

Step3>If there is any violation of table, then

Step4>It will show the appropriate message on the form

Step5>There will be several buttons on the form like addition, deletion, Edit, Update, Show, etc

Step6> In which one will be closed and other will be exit for proper shut of the form.

### **Applicant Detail Modules:-**

Step1>There are several label and textbox.

Step2>There will be check in the form

Step3>it will check for the authorized user login in the form or not if

Step4>user are not authorized, it will show a message

Step5:-And the form will be closed

Step6:-if the users is authorized then

Step7:-it will show the name of applicant and its detail.

### **Nominee detail Modules:-**

Step1>There will be check in the form

Step2:-Only authorized user can login in the form

Step3>User will put his id and password to enter in the form

Step4:- If the user is authorised then

Step5:-it will show all the details of Nominee of the client who approaches for the loan.



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

Step6:-there will be buttons for proper shut of the form.

Step7:-Exit

### **Guranter Detail Modules:-**

Step1>There are several label and according to label there are text box on the form.

Step2:-All the details of gurenter are present on the form.

Step3:-There will be check in the form according to the table created if

Step4:-there will any violation of the field then

Step5: it will show the 'error message' on the form.

Step6:-Exit

### **Applicant's working Detail Modules:-**

Step1>There are several label and according to label there are text box on the form.

Step2:-All the details of Applicant's working are present on the form

Step3:-There will be check in the form according to the table created if

Step4:-there will any violation of the field then

Step5: it will show the 'error message' on the form.

Step6:-Exit

### **Account Detail Modules:-**

Step1> There will be form for the Account of the Loan applicant..

Step2>According to requirements all field will available on the form

Step3:- will be manipulated for the assessment of the IT o assesse.

Step4:- this same form

Step5:-Exit



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

### **Agreement Modules:-**

Step1>This form will check the authentication of logged customer

Step2>if the user is authorized then

Step3:-it will be display the detail of agreement between the bank and loan applicant.

Step6:-Successfully completion of the process

Step7:-Exit

### **Sanction Detail Modules:-**

Step1>There will be check in the form

Step2:-Only authorized user can login in the form

Step3>User of the application will put his id and password to enter in the form

Step4:-if the user is authorized then

Step5:-it will show all the details of loan sanctioned and also the terms and conditions.

Step6:-there will be buttons for proper shut of the form.

Step7:-Exit

### **Repayment detail Modules:-**

Step1>There will be check in the form

Step2:-Only authorized user can login in the form

Step3>User of the software will put his id and password to enter in the form

Step4:-if the user is authorized then

Step5:-it will show all the details of what is the mode of repayment of the loan and also the terms and conditions. & also the rate of interest ,mode of payment etc.

Step6:-there will be buttons for proper shut of the form.

Step7:-Exit



## DATA STRUCTURES

This project will contain the following structure :-

### LOAN DETAIL : (used to keep the details of loans)

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Sl_no	Number(2)	composite primary key.
Type	Varchar2(25)	not null.
Purpose	Varchar2(25)	not null.
Eligibility	Varchar2(25)	not null.
Amount	number(10)	not null.
Margin	Varchar2(25)	not null.
Fee	number(10)	
Repayment	Varchar2(25)	not null.
Interest rate	Varchar2(25)	not null.
Security	Varchar2(25)	not null.

Note: -

STL/MTL/LTL is taken for Short-Term-Loan, Medium-Term-Loan and

Long-Term-Loan.

**APPLICANT DETAIL : (It keeps the records of applicant)**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
*App_code	number(10)	primary key.
App_name	Varchar2(25)	not null.
Age	number(3)	not null.
Sex	Varchar2(10)	
F_name	Varchar2(25)	
Co_So_Reg_No	number(10)	
Address	Varchar2(25)	not null.
Phone	number(12)	
Occupation	Varchar2(25)	
O_address	Varchar2(25)	
O_phone	number(12)	
Emp_code	number(10)	
Salary	number(10)	
D-O-J	Date	
D-O-R	Date	

Note :-

The App\_name will contain the names of Person/Society/Company.

In case of the Person Sex, Father's Name, Occupation, emp\_code, Salary,

D-O-J, D-O-R will be taken. For Society/Company these will not apply.

But we have to take Company/Society Registration no. in latter case.

**NOMINEES DETAIL : (It keeps the records of nominees)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
App_code	number(10)	foreign key ref. Applicant Detail.
N-name	Varchar2(25)	not null.
Age	number(3)	not null.
Sex	Varchar2(10)	not null.
F_name	Varchar2(25)	not null.
H_address	Varchar2(25)	not null.
Occupation	Varchar2(25)	not null.
Organization	Varchar2(25)	
Address	Varchar2(25)	not null.
Phone	number(12)	
Salary	number(10)	
Relation	Varchar2(25)	

**GUARANTOR DETAIL : ( It keeps the records of guarantors)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
*Index no	number(10)	primary key.
App_code	number(10)	foreign key ref. Applicant Detail.
G_name	Varchar2(25)	not null.
Age	number(10)	not null.
Sex	Varchar2(10)	
F_name	Varchar2(25)	
H_address	Varchar2(25)	



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Occupation	Varchar2(25)
Organization	Varchar2(25)
Address	Varchar2(25)
Phone	number(12)
Salary	number(10)
Relation	Varchar2(25)

### **APPLICANT'S WORKING DETAIL : (Keeps source of income records of The applicant)**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
App_code	number(10)	foreign key ref. Applicant Detail.
Type	Varchar2(25)	
Firm name	Varchar2(25)	
Firm address	Varchar2(25)	
Firm phone	number(10)	
Monthly income	number(10)	not null
Annual income	number(10)	not null
Starting date	Date	

### **ACCOUNT DETAIL : (It keeps the applicant's account records )**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
App_code	number(10)	foreign key ref. Applicant Detail.
*Ac_Id	number(10)	primary key.
Date-o-opening	Date	not null
App_address	Varchar2(25)	not null



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Deposit amount	number(10)	not null
Deposit date	Date	not null
Credit amount	number(10)	not null
Credit date	Date	not null
Balance amount	number(10)	not null

### AGREEMENT DETAIL : (It keeps details of agreement)

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
*Agg_no	number(10)	primary key.
Ac_Id	number(10)	foreign Key ref. Account Detail.

### AGG\_PROP DETAIL :{STL,MTL,LTL} (It keeps detail of prop. Agreement)

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Ac_Id	number(10)	foreign Key ref. Account Detail.
Prop_name	Varchar2(25)	not null.
F_name	Varchar2(25)	not null.
Organization	Varchar2(25)	

**AGG\_PART DETAIL :{STL,MTL,LTL} (It keeps records of partners applicant)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Loan type	Varchar2(3)	foreign key ref. Loan Detail.
Ac_Id	number(10)	foreign Key ref. Account Detail.
Partner1 name	Varchar2(25)	not null.
Partner2 name	Varchar2(25)	
Partner3 name	Varchar2(25)	
Partner4 name	Varchar2(25)	
F1_name	Varchar2(25)	not null.
F2_name	Varchar2(25)	
F3_name	Varchar2(25)	
F4_name	Varchar2(25)	
Organization	Varchar2(25)	

**AGG\_TYPE\_JF DETAIL :{ {STL,MTL,LTL} (It keeps records of joint family)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Ac_Id	number(10)	foreign Key ref. Account Detail.
Family head	Varchar2(25)	not null.
F_name	Varchar2(25)	
Organization	Varchar2(25)	

**1. AGG\_TYPE\_RULE DETAIL : {STL,MTL,LTL} (It keeps the rules of the three loan-type)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Loan type	Varchar2(3)	foreign key ref. Loan Detail.
Agg_no	number(10)	foreign key ref. Agreement detail
Loan_Amt	number(10)	not null.
Interest Rate	number(10)	not null.
Agg_data	Date	not null.
Installment no	number(2)	
Repayment Time	number(10)	
Witness name	Varchar2(25)	not null.
App_sign	Varchar2(25)	not null.
Officer name	Varchar2(25)	not null.
Designation not null.	Loan type	Varchar2(3) foreign key ref. Loan Detail.

**FORM DETAIL : (It keeps records of different forms)**

<u>Field</u>	<u>Data-Type(Width)</u>	<u>constraints</u>
Form_Id	number(10)	primary key.
App_code	number(10)	foreign key ref. Applicant Detail.
Ac_Id	number(10)	foreign Key ref. Account Detail.

**LOAN\_TYPE\_FORM DETAIL : {STL,MTL,LTL} (It keeps records of all three-types loan Forms)**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
Loan type	Varchar2(3)	foreign key ref. Loan Detail.
Form_Id	number(10)	foreign key ref. Form Detail.
Ref_no	number(10)	primary key.
To_info	Varchar2(25)	
From _info	Varchar2(25)	
Date-o-fill	Date	not null
Type	Varchar2(25)	not null
Date-o-receipt	Date	not null
Cor_sr_no	number(10)	not null
Bank_address	Varchar2(25)	not null
Bank_branch	Varchar2(25)	not null
Date_o_recall	Date	
Date-o-Bill_Transfer	Date	
Sanctioned_Amt	number(10)	not null.
Date_o_first_install	Date	not null.
Date_o_Last_install	Date	not null.
Date_o_Per_renewal	Date	not null.
Security_disposed	Varchar2(25)	not null
App_sign	Varchar2(25)	not null
Officer sign	Varchar2(25)	not null
Designation	Varchar2(25)	not null



**SANCTION DETAIL : ( It keeps the details of sanction process of all  
Types of the loans)**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
Loan type	Varchar2(3)	foreign key ref. Loan Detail.
App_code	number(10)	foreign key ref. Applicant Detail.
Ac_Id	number(10)	foreign Key ref. Account Detail.
To_info	Varchar2(25)	not null
From _info	Varchar2(25)	not null
Date –o-Sanction	Date	not null.
Bank code	number(10)	not null.
Bank branch	Varchar2(25)	not null
Sl_no	number(10)	
Officer_name	Varchar2(25)	not null
Designation	Varchar2(25)	not null
Total services	Varchar2(25)	not null
Amount	number(10)	
Applicant_income	number(10)	
Security	Varchar2(25)	not null
Repayment_prog	Varchar2(25)	not null
Remarks	Varchar2(25)	
Branch Manager	Varchar2(25)	not null



**REPAYMENT DETAIL : (It keeps details of monthly return data of Applicant with respect to the Account)**

<b><u>Field</u></b>	<b><u>Data-Type(Width)</u></b>	<b><u>constraints</u></b>
Loan type	Varchar2(3)	foreign key ref. Loan Detail.
Ac_Id	number(10)	foreign Key ref. Account Detail.
App_code KeyNameOfBorrower	number(10) Varchar2(25)	foreign key ref. Applicant Detail. not null.
Amount detail	number(10)	
Interest Rate	number(10)	
Particular	Varchar2(25)	not null.
Adjust Date	Date	
Debits	number(10)	
Credits	number(10)	
Remarks	Varchar2(25)	not null.
To_info	Varchar2(25)	
From_info	Varchar2(25)	
Branch Manager	Varchar2(25)	not null.



# TESTING

## Primary Objectives

- Testing is a process of executing a software program with the intention of finding an error.
- A good test case is one that has a high probability of Finding an as-yet undiscovered error.
- A successful test is one that uncovers an as-yet undiscovered error.

## Secondary objective

- Design tests that systematically uncover different classes of errors.
- Do so with a minimum of time and effort.
- Provide reliable indication of software quality.

## Test Techniques 1

Classified according to the criterion used to measure the adequacy of a set of test cases:

-Coverage-based testing

- Testing requirement are classified in terms of the coverage of the product to be tested.

-Fault-based testing

- Fault detecting the ability of the test set determines the adequacy.

-Error-based testing

- Focus on error-prone points, based on knowledge of the typical errors that people make.

Exception handling is used to capture:

1. Errors
2. Faults
3. Failures
4. I am still sleeping ...



## Test technique 2

Test techniques are classified based on the source of the information used to derive test cases:

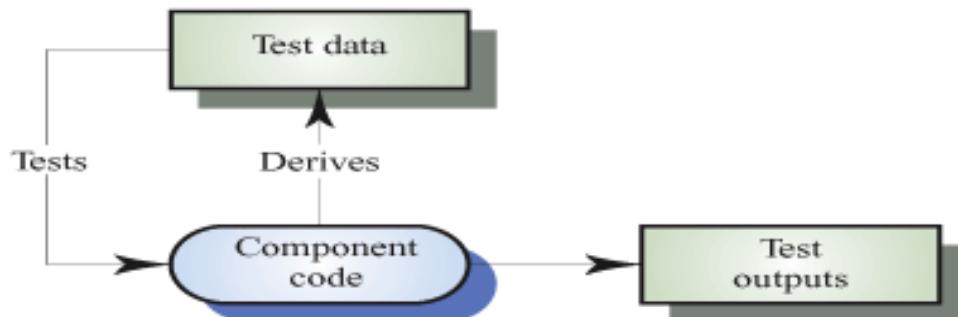
- white (glass) box testing
  - Also called structural or program-based testing
- Black box testing
  - Also called functional or specification based testing

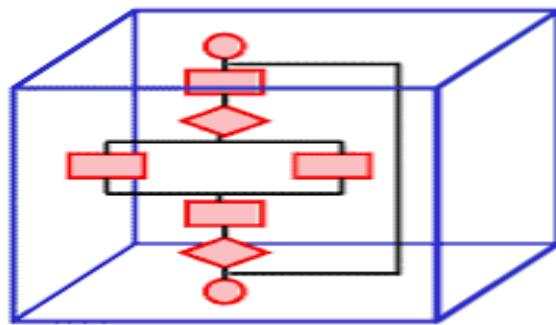
## Black box testing

- An approach to testing where the program is considered as a 'black-box'
- The program test cases are based on the system specification
- Test planning can begin early in the software process
  
- Input data and output results often fall into different classes where all members of a class are related
- Each of these classes is an equivalence portion where the program behaves in an equivalent way for each class member
- Test cases should be chosen from each partition.

## White Box Testing

- Also called structural testing
- Derivation of test cases according to program structure. knowledge of the program is used to identify additional test cases.
- Objective is to exercise all program statements.





- Exercise all independent paths within a module at least once.
- Exercise all logical decision on their true and false sides.
- Exercise all loops at their boundaries and within their operational bounds.
- Exercise all internal data structures to assure their validity.

### Testing Level:

Three levels of testing were carried out in each phase:

- Unit testing: It tests a code function.
- Integration function: It checks interdependency of different modules.
- System Testing: It tests the applications' functionality as was specified in the detailed functionality detail.

The testing level situation is illustrated below:

**Unit Testing:** - It is normally performed on individual module as each module of the proposed system has been developed, the modules are being tested .at the times coding there are so many errors inside the unit modules and it was removed while testing that particular unit module s. inside the unit modules , when the unit module does not match with our target it will be placed into Black box Testing , while if there is only "syntax errors" it is just removed and we can placed that errors into white-box errors. The syntax errors while coding the project will be placed in white-box testing because this type of errors is just syntax errors. It can be removed while executing the unit modules.

**Integration Testing:** - It is performed after unit testing. Integration testing is a systematic technique for constructing the programme



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structure while conducting tests to uncover errors associated with interfacing. It is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. Integration testing divided into the following test phases:

- ✓ User interaction
- ✓ Data manipulation and analysis
- ✓ Display processing and generation
- ✓ Database management.

In Integration testing I have gone through "*Smoke Testing*". Smoke testing provides a number of benefits when it is applied on complex, time critical projects:

- ✓ Integration risk is minimized. Because it is conducted daily.
- ✓ The quality of the end-product is improved. Because the approach is construction oriented.
- ✓ Error diagnosis and correction are simplified.
- ✓ Progress is easier to assess.

### **System Testing:**

System testing makes a logical assumption that if all the parts of the system are correct, the goal will be successfully achieved. A small error can conceivably explode into a much larger problem. The best program is worthless if it does not meet user needs. Through System testing these problems can be reduced. System testing is actually series of different tests whose primary purpose is to fully exercise the computer -based system. Although, each test has been properly integrated and perform the allocated functions.

Following major guidelines were taken under consideration while framing test cases for system testing:

1. We anticipated the potentials interfacing problems that might occur in our application.
2. We designed error-handling paths that tested all information coming from different elements of the system.
3. We conducted a series of tests that simulated bad data or other potential errors at the software interface.
4. Results of the entire test were recorded to use them as "evidence" if finger pointing occurred.

### **Types of Test:**



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

There are four types of tests that GCRPL must satisfy:

1. Functional Tests
2. Performance Tests
3. Stress Tests
4. Structural Tests

### **Functional Test:**

Functional test cases specify typical operating conditions, typical input values, and typical expected results.

In case of GCRPL, we conduct the functionality test on these phases:

- ✓ Assumed initial values and system defaults.
- ✓ Special values such as files containing identical values.
- ✓ Boundary conditions just inside and just beyond the boundaries.
- ✓ The nominal input values for which the expected results were known.

### **Performance Testing:**

Performance testing is designed to verify response time, execution time, Throughput and traffic rates on data channels.

Performance testing in **GCRPL** was carried out in multi user mode and data was entered manually. After testing the results, it was found that the program and the system as a whole meet all the specified requirements.

### **Stress Testing:**

Stress testing are designed to overload a system in the various ways, such as attempting to sign on more than the maximum allowed number of terminals, processing more than the allowed number of identifiers or static levels, or disconnecting a communication link. The purpose of the stress testing is to determine the limitations of the GCRPL application.

The GCRPL application was executed with resources in abnormal quantity, frequency and volume:

1. Test cases that required maximum memory /resources. The test case tested no. of installed GCRPL applications that could be opened on a 8MB RAM system with different login passwords and different arbitrary operations were performed on each.
2. Test cases that causes thrashing in virtual operating system were constructed. Too many GCRPL applications were opened one system till it gave the message that the system was running on virtual memory.



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

3. Input data rates were increased to large extent to see how inputs affected the outputs.

### **Structural Testing:**

Structural tests are concerned with examining the internal processing logic of a software system. The particular routines called and the logical paths traversed through the routines are the objects of interest. The goal of structural testing is to traverse a specified number of paths through each routine in the GCRPL application to establish thoroughness to testing.

All testing was done manually and manually entered test data were used. During the various test, bugs were fixed.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

# INPUT AND OUTPUT SCREENS

# INPUT



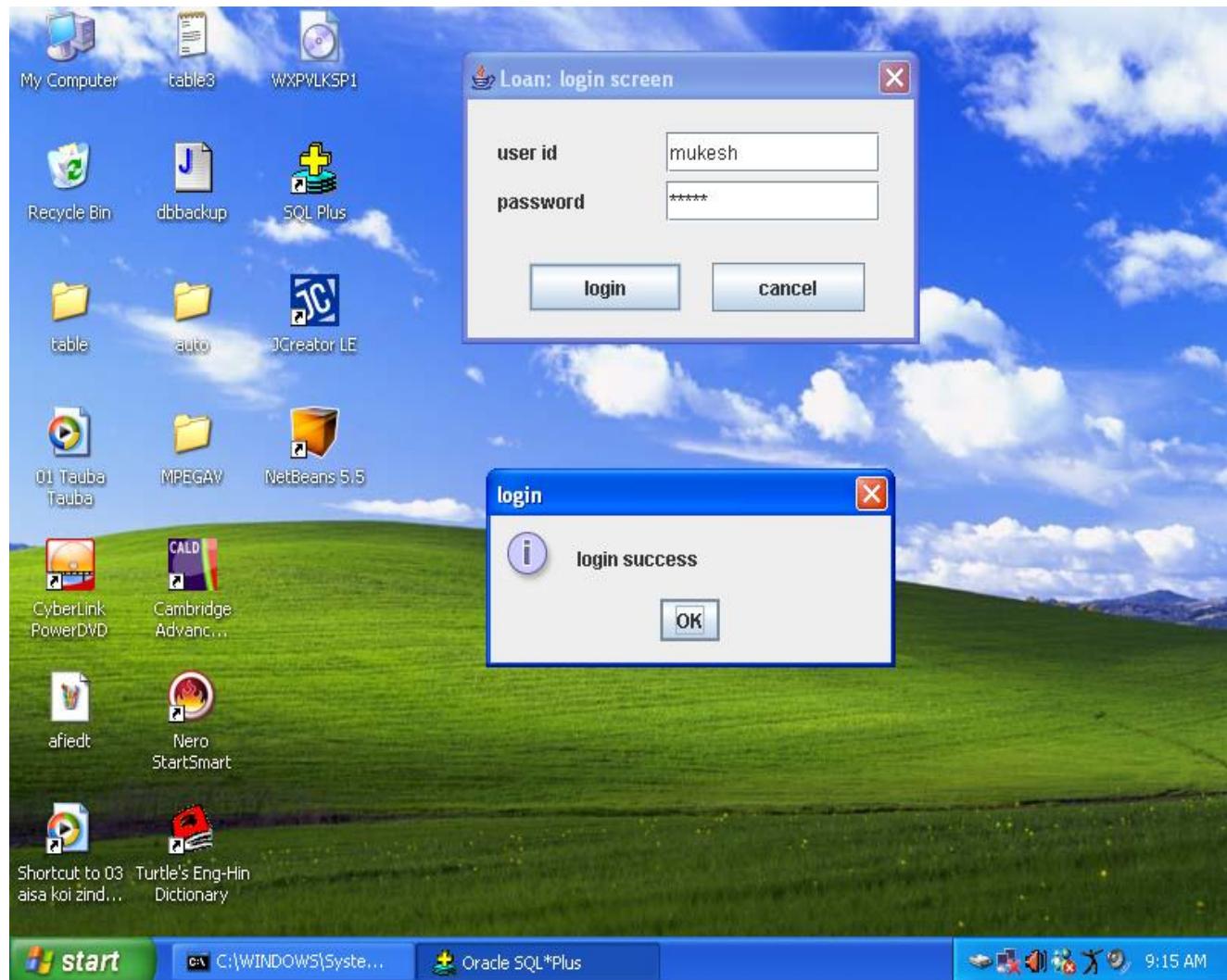
# SPLASH FORM



THIS IS THE SPLASH FORM USED TO DISPLAY THE TITLE OF THE PROJECT AND ITS DEVELOPER'S NAME .



# LOGIN FORM



THIS IS THE LOGIN FORM WHICH IS USED TO ENTER THE PROJECT BY PROVIDING CORRECT USER NAME AND PASSWORD.

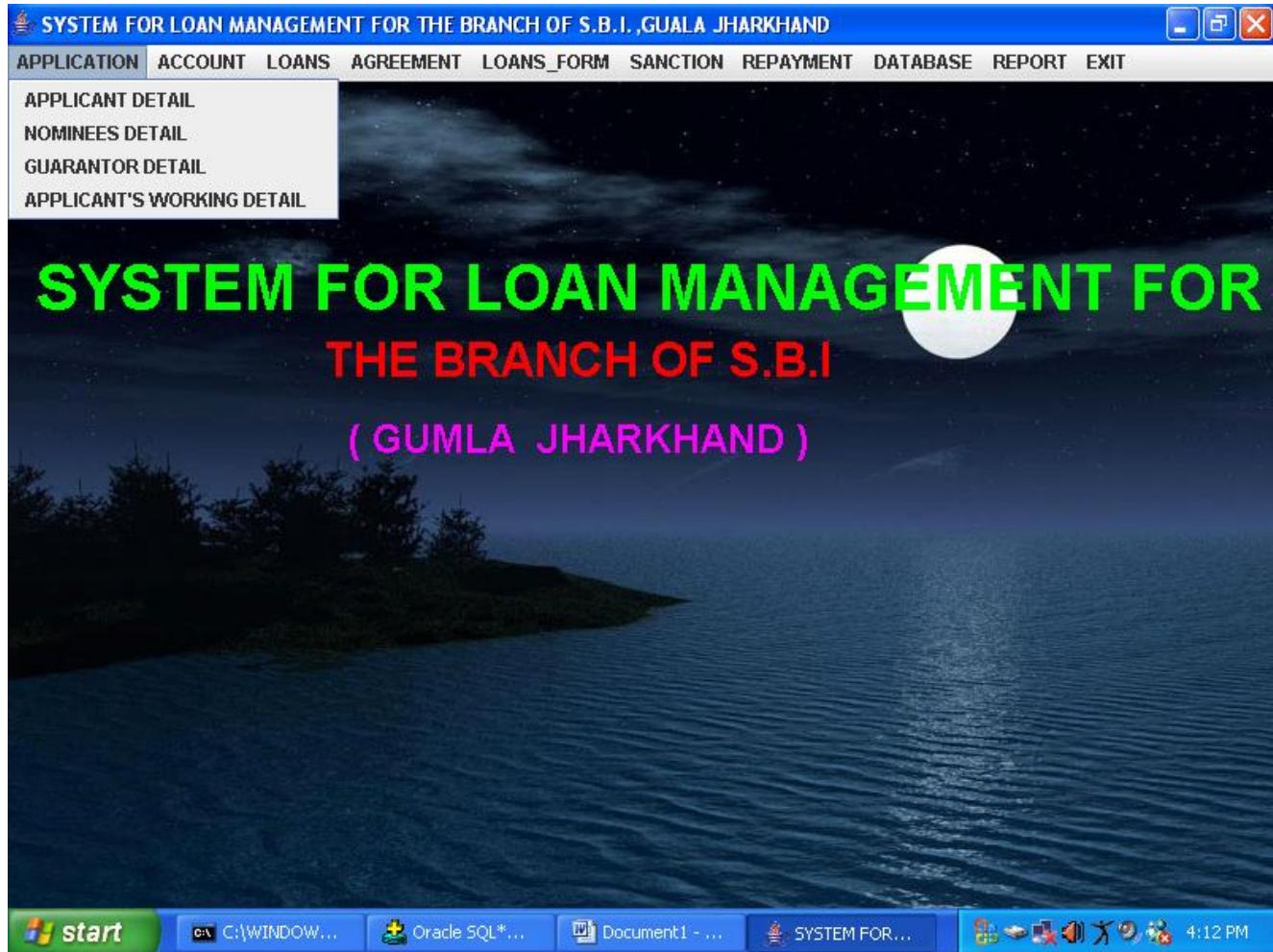


THIS IS THE MDI FORM USED TO CONNECT THE FORMS OF THE PROJECT.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

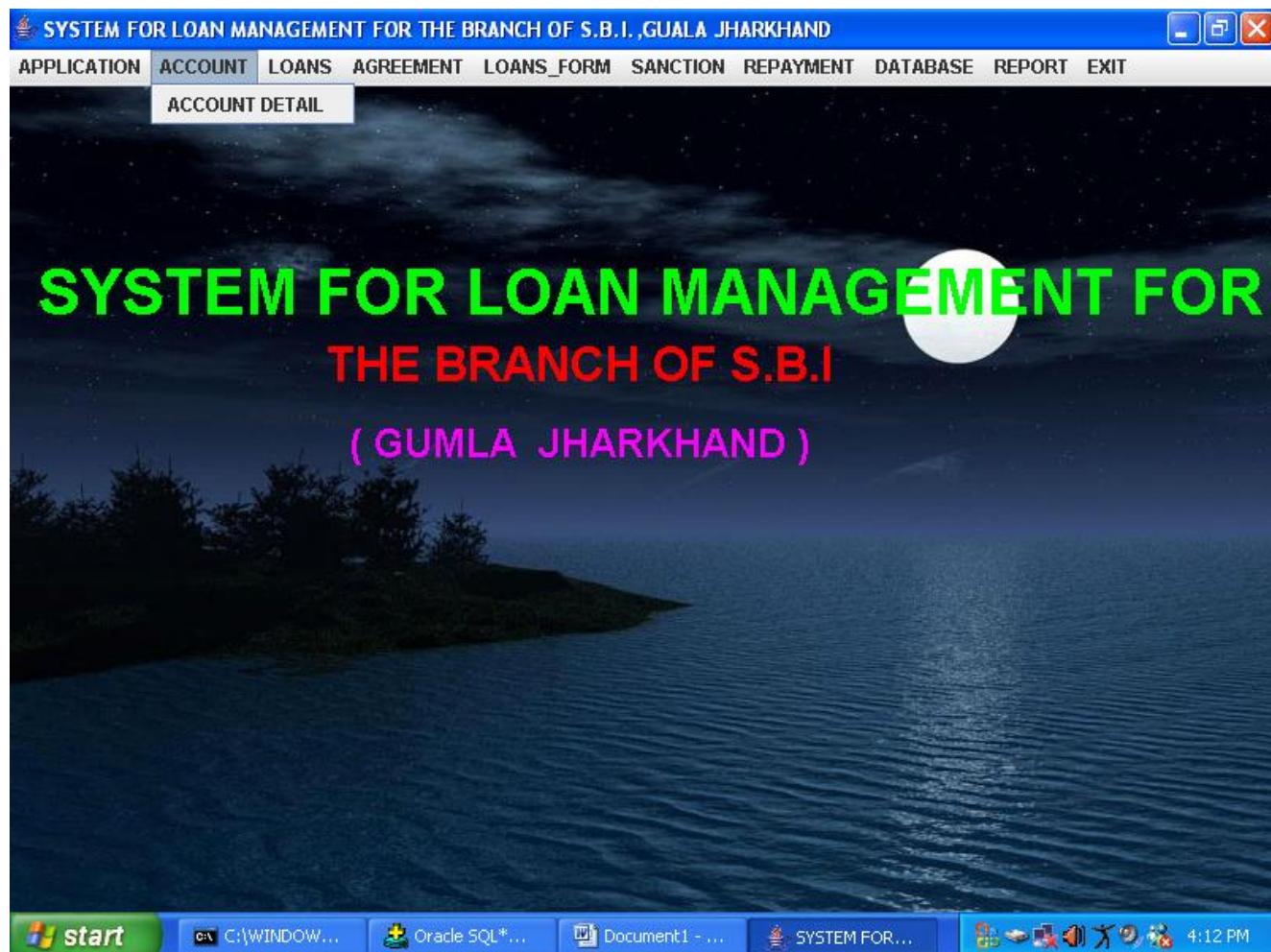
# MENU AND SUBMENU FORM





SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

# MENU AND SUBMENU FORM





# MENU AND SUBMENU FORM



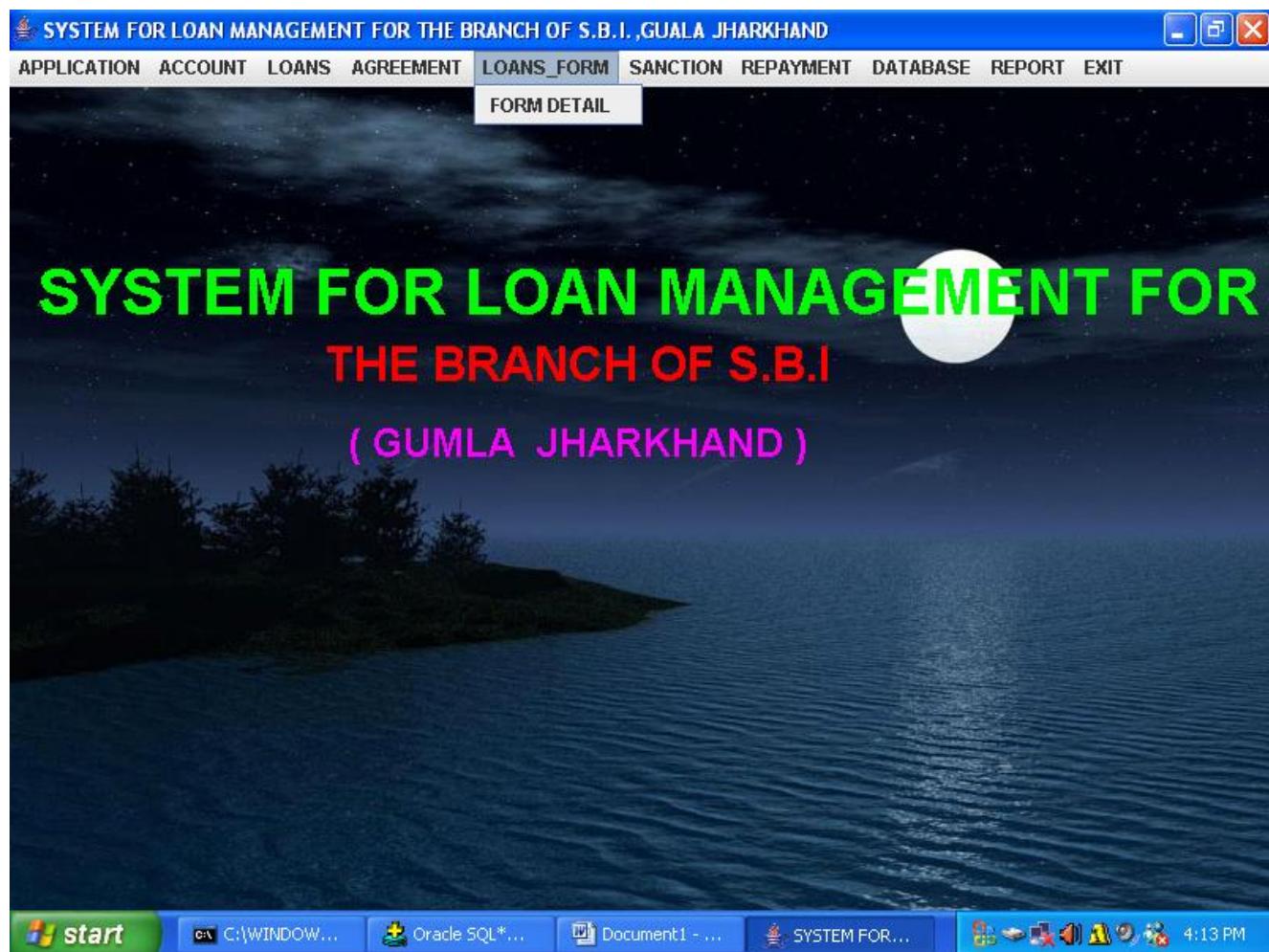


# MENU AND SUBMENU FORM



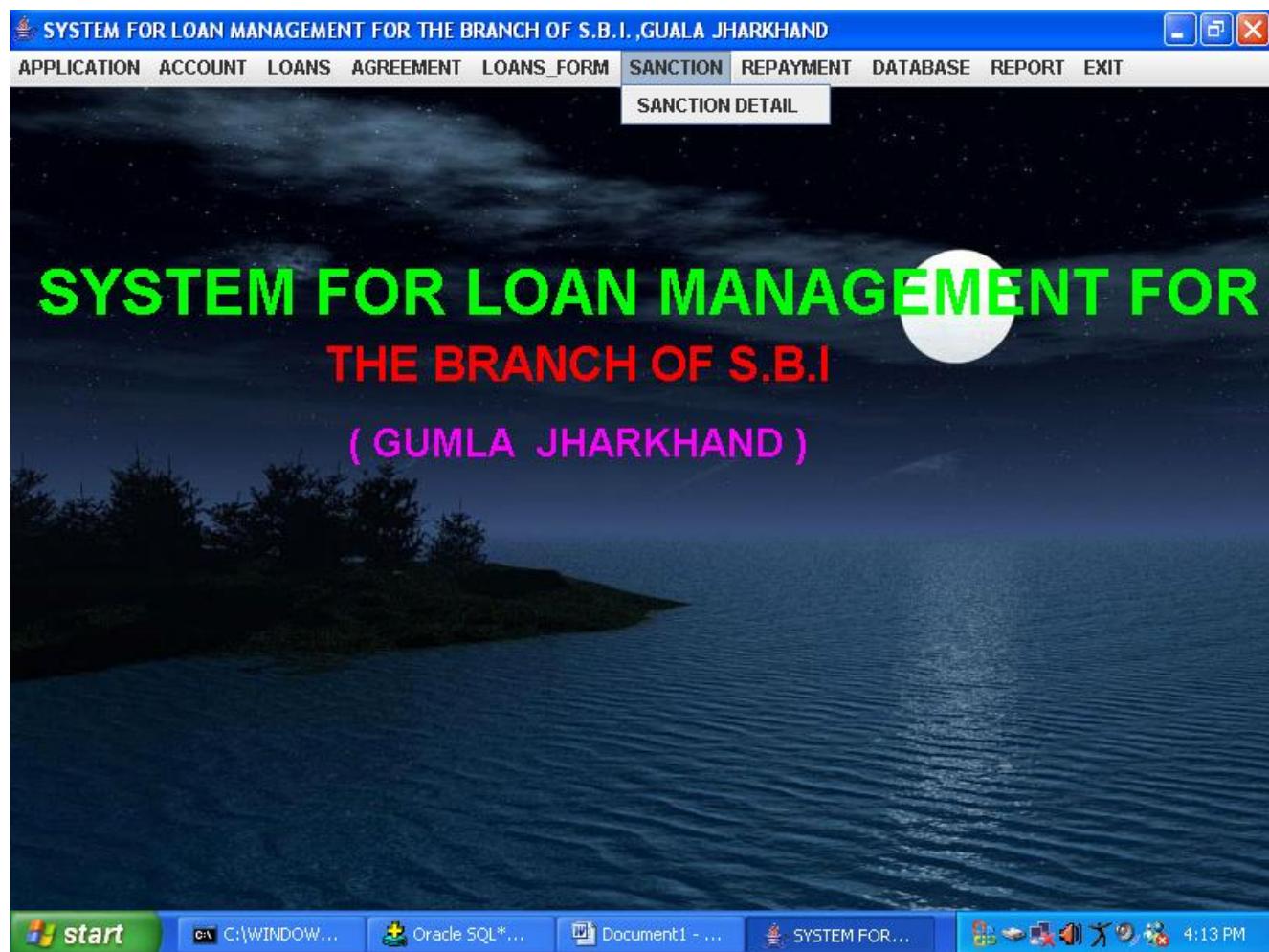


# MENU AND SUBMENU FORM





# MENU AND SUBMENU FORM





# MENU AND SUBMENU FORM



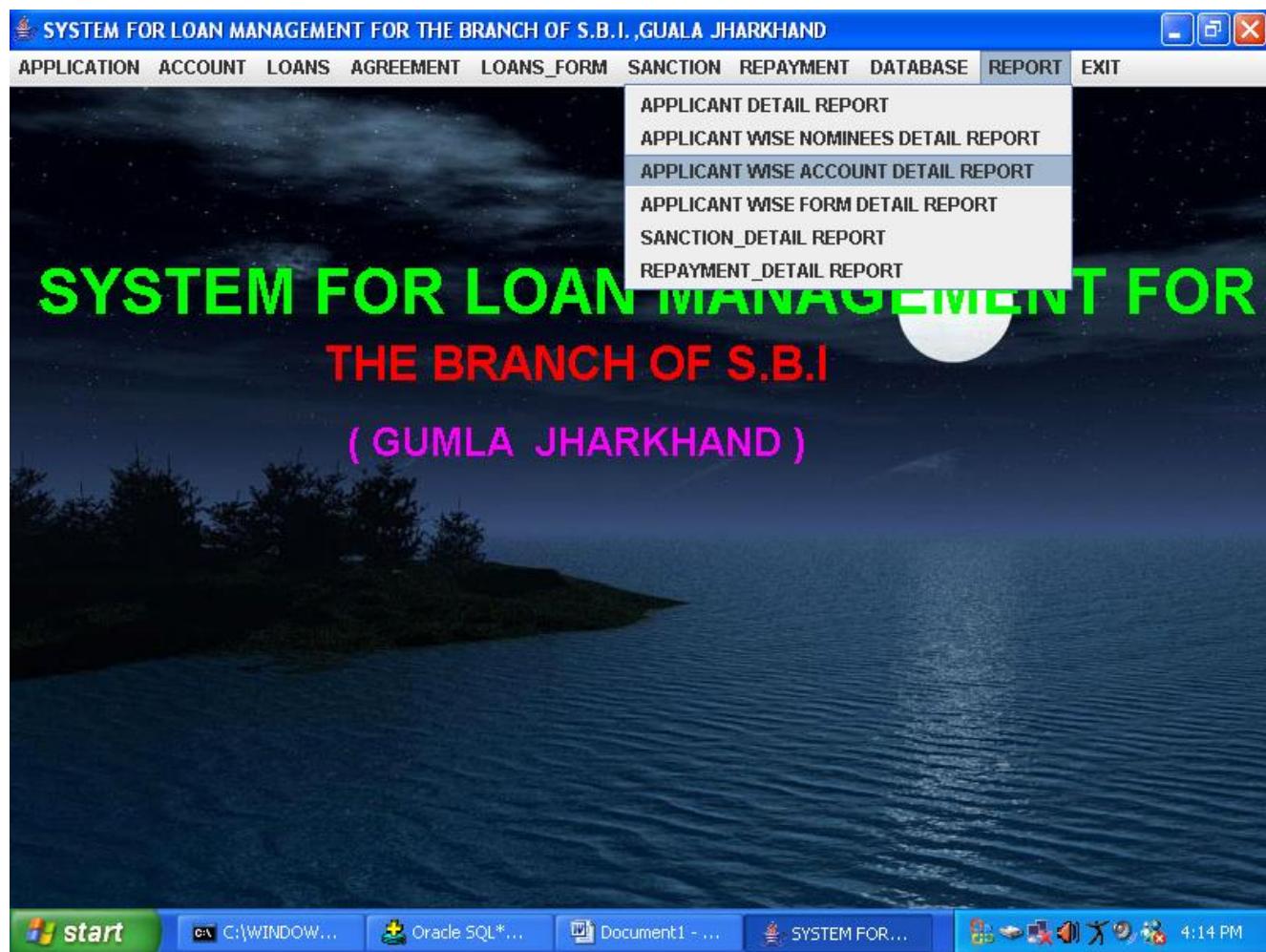


# MENU AND SUBMENU FORM





# MENU AND SUBMENU FORM





## APPLICANT DETAIL FORM

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : APPLICANT\_DETAIL

### APPLICANT DETAIL INFORMATION

APPLICANT DETAIL FORM		query	show
App_code	101	Occupation	Service
App_name	Mukesh kumar	O_address	Lakshmi Bigha
Age	20	O_phone	9308763054
Sex	Male	Emp_code	105
F_name	Kamlesh prasad	Salary	10000
Co_So_Reg_No	1254	D_O_J	02-02-2006
Address	Patna	D_O_R	02-02-2047
Phone	9308763054		

1/2      [first](#)      [prev](#)      [next](#)      [last](#)      [refresh](#)

[add](#)      [edit](#)      [delete](#)      [query](#)      [show](#)      [close](#)

start C:\WINDOWS\... Oracle SQL\*Plus 2 Java(TM) 2... Document1 - M... 4:24 PM

THIS IS THE APPLICANT DETAIL FORM SHOW THE APPLICANT'S INFORMATION.



## NOMINEES DETAIL FORM

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : NOMINEES\_DETAIL

### NOMINEES DETAIL INFORMATION

NOMINEES DETAIL FORM    query    show

App_code	5	Occupation	Service
N_name	Sonu	Organization	Bank
Age	45	Address	Patna
Sex	Male	Phone	9801469651
F_name	Vijay kumar	Salary	15000
H_address	Patna	Relation	Uncle

1/2    first    prev    next    last    refresh

add    edit    delete    query    show    close

start    C:\WINDOWS\...    Oracle SQL\*Plus    Java(TM) 2...    Doc2 - Microso...    4:28 PM

THIS IS THE NOMINEES DETAIL FORM USED TO KEEP RECORDS OF THE NOMINEES.



## GUARANTOR DETAIL FORM

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : GUARANTOR\_DETAIL

### GUARANTOR DETAIL INFORMATION

GUARANTOR DETAIL FORM		query	show
Index no	4	Occupation	Service
App_code	5	Organization	Bank
G_name	Sonu	Address	Patna
Age	45	Phone	9801469651
Sex	Male	Salary	15000
F_name	Vijay kumar	Relation	Uncle
H_address	Patna		

1/1      first      prev      next      last      refresh

add      edit      delete      query      show      close

start C:\WINDOWS\... Oracle SQL\*Plus 2 Java(TM) 2... Doc2 - Microso... 4:32 PM

THIS IS THE GUARANTOR DETAIL FORM USED TO KEEP RECORDS OF THE GUARANTOR.



## APPLICANT'S WORKING DETAIL FORM

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : APPLICANT'S WORKING\_DETAIL

### APPLICANT'S WORKING DETAIL INFORMATION

AP.WORK\_DETAIL FORM [query](#) [show](#)

App_code	5	Firm phone	9801469652
Loan type	STL	Monthly income	15000
Firm name	Shyamnandan	Annual income	190000
Firm address	Patna	Starting date	02-02-2008

1/4    [first](#) [prev](#) [next](#) [last](#) [refresh](#)

[add](#) [edit](#) [delete](#) [query](#) [show](#) [close](#)

start C:\WINDOWS\... Oracle SQL\*Plus 2 Java(TM) 2... Doc2 - Microsoft... 4:35 PM

THIS IS THE APPLICANT'S WORKING DETAIL FORM USED TO KEEP RECORDS OF THE APPLICANT'S WORKING DETAIL



## DATABASE CREATION FORM

SYSTEM FOR LOAN MANAGEMENT FIR THE BRANCH OF S.B.I., GUMLA JHARKHAND: database creation

create database

old user dropped successfully  
new user created successfully  
grant to user is successful  
loan\_detail table created successfully  
applicant\_detail table created successfully  
nominees\_detail table created successfully  
Guarantor\_Detail table created successfully  
Applicant\_Working\_Detail table created successfully  
Account\_Detail table created successfully  
Agreement\_Detail table created successfully  
Agg\_Prop\_Detail table created successfully  
Agg\_Part\_Detail table created successfully  
Agg\_Type\_Jf\_Detail table created successfully  
Agg\_Type\_Rule\_Detail table created successfully  
Form\_Detail table created successfully  
Loan\_Type\_Form\_Detail table created successfully  
Sanction\_Detail table created successfully  
Repayment\_Detail table created successfully  
Security\_Detail table created successfully

**Database Result**

user & tables created successfully

start C:\ Or... 4 D... 32... 5:13 PM



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : ACCOUNT\_DETAIL

## ACCOUNT DETAIL INFORMATION

ACCOUNT DETAIL FORM    query    show

App_code	5	Deposit date	5-5-2007
Ac_Id	5	Credit amount	50000
Date of opening	5-5-2006	Creadit date	5-9-2006
App address	Patna	Balance amount	500000
Deposit amount	100000		

1/1    first    prev    next    last    refresh

add    edit    delete    query    show    close

start C:... Or... 2 J... D... Ansh 4:39 PM

THIS IS THE ACCOUNT DETAIL FORM USED TO KEEP RECORDS OF THE ACCOUNT.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I :LOAN\_DETAIL

## LOAN DETAIL INFORMATION

LOAN DETAIL FORM    query    show

SI_no	11	margin	50000
Loan Type	STL	Fee	25000
Purpose	Car loan	Repayment	50000
Eligibility	BCA	interest rate	8%
Amount	500000	Security	Home

1/1	first	prev	next	last	refresh
add	edit	delete	query	show	close

start C... Or... 3 J... D... Ansh 4:43 PM

THIS IS THE LOAN DETAIL FORM USED TO SHOW THE RECORDS OF THE LOAN.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.: LOAN\_TYPE\_FORM DETAIL

## LOAN\_TYPE\_FORM DETAIL INFORMATION

LTF DETAIL FORM    query    show

Loan type	11	Date_o_recall	1-9-2007
Form_Id	5	Date_Bill_Transfer	1-9-2008
Ref_no	1254	Sanctioned_Amt	xyu
To_info	Patna	Date_o_first_install	04-04-2008
From_info	Ranchi	Date_o_second_in...	02-05-2008
Date_o_fill	1-9-2006	Date_o_per_renew...	05-04-2008
Type	STL	Security_disposed	Home
Date_o_receipt	02-02-2006	App_sign	mukesh kumar
Cor_sr_no	110	Officer sign	xfgxg
Bank_address	Patna	Designation	jfsdj
Bank_branch	Gumla Jharkhand		

1/2    first    prev    next    last    refresh

add    edit    delete    query    show    close



THIS IS THE LOAN\_TYPE FORM DETAIL FORM USED TO SHOW THE RECORDS OF THE LOAN\_TYPE FORM DETAIL.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGREEMENT DETAIL

## AGREEMENT DETAIL INFORMATION

AGREEMENT DETAIL FORM [query](#) [show](#)

Agg_no	105
Ac_Id	5

1/2	first	prev	next	last	refresh
add	edit	delete	query	show	close



THIS IS THE AGREEMENT DETAIL FORM USED TO SHOW THE RECORDS OF THE AGREEMENT.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG\_PRO DETAIL

## AGG\_PRO DETAIL INFORMATION

AGG\_PRO DETAIL FORM query show

Ac_Id	5
Prop_name	Chandan sharma
F_name	Narendra sharma
Organization	Bank

1/1 first prev next last refresh

add edit delete query show close

4:55 PM

THIS IS THE AGG\_PROP DETAIL FORM USED TO SHOW THE RECORDS OF THE AGG\_PROP DETAIL.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG\_PART DETAIL

## AGG\_PART DETAIL INFORMATION

A\_PART DETAIL FORM    query    show

Loan type	11	F1_name	Ramnath singh
Ac_Id	5	F2_name	Shyam prasad
Partner1 name	Sonal singh	F3_name	Rama chaudhry
Partner2 name	Ram prasad	F4_name	Rajnath chaurasia
Partner3 name	Amit chaudhary	Organization	Bank
Partner4 name	Aman chaurasia		

0/0    first    prev    next    last    refresh

add    edit    delete    query    show    close

start C:... Or... 2 J... D... 32... 5:01 PM

THIS IS THE AGG\_PART DETAIL FORM USED TO SHOW THE RECORDS OF THE AGG\_PART DETAIL.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG\_TYPE\_JF DETAIL

## AGG\_TYPE\_JF DETAIL INFORMATION

AT\_JF DETAIL FORM    query    show

Ac_Id	5
Family head	Kamlesh prasad
F_name	Ramnaresh Prasad
Organization	Agriculture

1/2    first    prev    next    last    refresh

add    edit    delete    query    show    close

start    C:\ Or... 3 J... D... 32... 5:03 PM

THIS IS THE AGG\_TYPE\_JF DETAIL FORM USED TO SHOW THE RECORDS OF THE AGG\_TYPE\_JF.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : FORM DETAIL

## FORM DETAIL INFORMATION

FORM DETAIL FORM    query    show

Form_Id	5
App_code	5
Ac_Id	5

1/2    first    prev    next    last    refresh

add	edit	delete	query	show	close
-----	------	--------	-------	------	-------

start    C:\...    Or...    4 J...    D...    32...    5:05 PM

THIS IS THE FORM DETAIL FORM USED TO SHOW THE RECORDS OF THE FORM.



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : SANCTION DETAIL

## SANCTION DETAIL INFORMATION

SANCTION DETAIL FORM    query    show

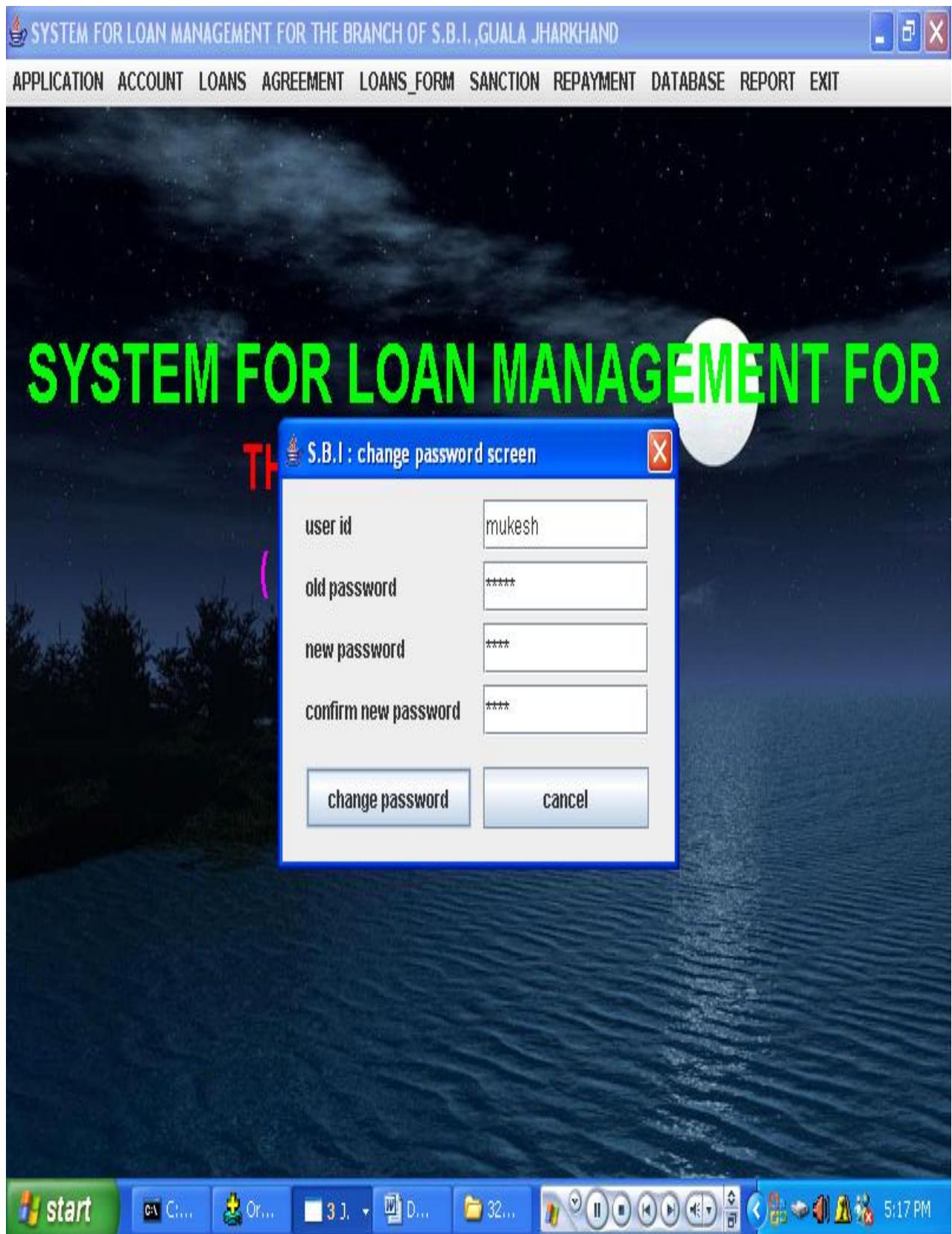
Loan type	11	Total services	4
App_code	5	Amount	400000
Ac_Id	5	Applicant_income	10000
To_info	Patna	Security	Home
From_info	Ranchi	Repayment_prog	500000
Date_o_sanction	02-05-2006	Remarks	545
Bank_code	0452	Branch Manager	jsadj
Bank_branch	Gumla Jharkhand		
SI_no	101		
Officer_name	xzy		
Designation	asdh		

1/2    first    prev    next    last    refresh

add    edit    delete    query    show    close

start    C:\...    Or...    4 J...    D...    32...    5:08 PM

THIS IS THE SANCTION DETAIL FORM USED TO SHOW THE RECORDS OF THE SANCTION.





SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

THIS IS THE CHANGE PASSWORD FORM USED TO CHAANGE THE PASSWORD OF THE MAIN FORM.

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : REPAYMENT DETAIL

## REPAYMENT DETAIL INFORMATION

REPAYMENT DETAIL FORM [query](#) [show](#)

Loan type	11	Adjust Date	2-2-2006
Ac_Id	5	Debits	50000
App_code	5	Credits	40000
KeyNameOfBorrow...	ggg	Remarks	540000
Amount detail	Installment	To_info	Patna
Interest rate	8%	From_info	Ranchi
Particular	6	Branch Manager	xzy

1/1 [first](#) [prev](#) [next](#) [last](#) [refresh](#)

[add](#) [edit](#) [delete](#) [query](#) [show](#) [close](#)

start C... Or... J... D... 32... 5:11 PM

THIS IS THE REPAYMENT DETAIL FORM USED TO SHOW THE RECORDS OF THE REPAYMDEDNT.



# OUTPUT



## APPLICANT DETAIL REPORT

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I., GUMLA JHARKHAND : Applicant\_Detail report

applicant\_detail c... 5 show show all print page setup close

applicant\_detail Report

AP...	AP...	AGE	SEX	F...	CO...	AD...	PH...	OC...	O...	O...	EM...	SA...	D...	D...
AP...	AP...	AGE	SEX	F...	CO...	AD...	PH...	OC...	O...	O...	EM...	SA...	D...	D...
5	5	5	5	5	5	5	5	5	5	5	5	5	18...	45...
8	8	8	88	88	8	8	8	8	8	88	8	8	74...	13...



start C...



Or...



4 J...



D...



32...



5:19 PM



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

THIS IS THE FINISHED APPLICANT DETAIL REPORT

## **NOMINEES DETAIL REPORT**



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : Nominees\_detail report

Nominees\_Detail ... 5 show show all print page setup close

Nominees\_detail Report

APP...	N_N...	AGE	SEX	F_N...	H_A...	OCC...	ORG...	ADD...	PHON...	SALA...	REL...
APP...	N_N...	AGE	SEX	F_N...	H_A...	OC...	OR...	ADD...	PH...	SAL...	REL...
5	4	4	444	4	4	8	4	4	4	4	4
5	4	4	444	4	4	8	4	4	4	4	4



THIS IS THE FINISHED NOMINEES DETAIL REPORT



## ACCOUNT DETAIL REPORT

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : account\_detail report

account\_detail co... 5

show show all print page setup close

account\_detail Report

APP_C...	AC_ID	DATE_...	APP_A...	DEPO...	DEPO...	CREDI...	CREDI...	BALAN...
APP_...	AC_ID	DATE_...	APP_A...	DEPO...	DEPO...	CREDI...	CREDI...	BALAN...
5	5	7777-	5	5	9999...	5	6666...	5

start C:\ Or... 4 J. D... 32... 5:22 PM

THIS IS THE FINISHED ACCOUNT DETAIL REPORT.



## FORM DETAIL REPORT

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I., GUMLA JHARKHAND : Form\_detail report

Form\_Detail code : 5 ▼ show show all print page setup close

Form\_detail Report

FORM_ID	APP_CODE	AC_ID
FORM_ID	APP_CODE	AC_ID
5	5	5
4	5	5



THIS IS THE FINISHED FORM DETAIL REPORT



## SANCTION DETAIL REPORT

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : Sanction\_Detail report

rptSanction\_Data... 11 show show all print page setup close

sanction\_detail Report

TY...	AP...	AC...	TO...	FR...	DA...	BA...	BA...	SL...	OF...	D...	TO...	AM...	AP...	SE...	R...	R...	B...
T...	A...	T...	F...	D...	B...	S...	O...	D...	T...	A...	A...	S...	R...	R...	B...		
11	5	5	4	4	5...	4	4	4	4	4	4	4	4	4	4	4	4
11	8	5	8	8	1...	8	8	8	8	87	8	8	8	8	8	8	88

Doc2 - Microsoft Word



## REPAYMENT DETAIL REPORT

SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I., GUMLA JHARKHAND : repayment\_Detail report

rptrepayment\_De... 11 show show all print page setup close

repayment\_detail Report

TYPE	AC...	APP...	KEY...	AM...	INT...	PA...	ADJ...	DE...	CR...	RE...	TO...	FR...	BR...
TY...	AC...	AP...	KE...	AM...	INT...	PA...	AD...	DE...	CR...	RE...	TO...	FR...	BR...
11	5	5	2	2	2	2	19...	2	2	2	2	2	2



coDING



\*\*\*\*\*

### SPLASH FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class splash extends JWindow
{
    Container c;
    JLabel lbl1,lbl2,lbl3,img,lblld,lblp;
    JProgressBar pb;
    long maxtimes=9999999;
    splash()
    {
        setBounds(200,150,490,300);
        c=getContentPane();
        c.setLayout(null);

        lbl1=new JLabel("SYSTEM FOR LOAN MANAGEMENT ",JLabel.CENTER);
        lbl1.setBounds(5,30,462,40);
        lbl1.setFont(new Font("Arial",Font.BOLD,26));
        lbl1.setForeground(Color.cyan);
        c.add(lbl1);

        lbl2=new JLabel("FOR THE BRANCH OF S.B.I.",JLabel.CENTER);
        lbl2.setBounds(10,80,540,30);
        lbl2.setFont(new Font("Arial",Font.BOLD,22));
        lbl2.setForeground(Color.green);
        c.add(lbl2);

        lbl3=new JLabel("(GUMLA JHARKHAND).",JLabel.CENTER);
        lbl3.setBounds(35,130,400,20);
        lbl3.setFont(new Font("Arial",Font.BOLD,14));
        lbl3.setForeground(Color.yellow);
        c.add(lbl3);

        pb=new JProgressBar();
        pb.setBounds(180,260,160,20);
        c.add(pb);

        lblld=new JLabel("Loading");
        lblld.setBounds(100,260,70,20);
        lblld.setFont(new Font("Arial",Font.BOLD,16));
        lblld.setForeground(Color.magenta);
        c.add(lblld);

        lblp=new JLabel("0%");
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lblp.setBounds(344,260,52,20);
lblp.setFont(new Font("Arial",Font.BOLD,16));
lblp.setForeground(Color.green);
c.add(lblp);

img=new JLabel(new ImageIcon("mukesh1.jpe"));
img.setBounds(0,0,490,300);
c.add(img);
for(int i=1;i<=100;i++)
{
    pb.setValue(i);
    lblp.setText(String.valueOf(i) + "%");
    for(long java=0;java<maxtimes;java++);
    show();
}
hide();
}
public static void main(String args[])
{
    splash f;
    f=new splash();
}
}
```

\*\*\*\*\***END OF SPLASH FORM CODING**\*\*\*\*\*

### LOGIN FORM CODING

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
class login extends JDialog implements ActionListener
{

static pj mdi=null;
JLabel lbl1,lbl2;
JTextField txt1;
JPasswordField txt2;
JButton btn1,btn2;
Container c;
Connection cn;
Statement st;
ResultSet rs;
String sql;

login(pj cmdi)
{
mdi=cmdi;

setTitle("Loan: login screen");
setBounds(250,200,300,180);
c=getContentPane();
c.setLayout(null);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl1 = new JLabel("user id");
lbl2 = new JLabel("password");

lbl1.setBounds(20,20,100,25);
lbl2.setBounds(20,50,100,25);

c.add(lbl1);
c.add(lbl2);

txt1 = new JTextField();
txt2 = new JPasswordField();

txt1.setBounds(130,20,140,25);
txt2.setBounds(130,50,140,25);

c.add(txt1);
c.add(txt2);

btn1 = new JButton("login");
btn2 = new JButton("cancel");

btn1.addActionListener(this);
btn2.addActionListener(this);

btn1.setBounds(40,100,100,30);
btn2.setBounds(160,100,100,30);

c.add(btn1);
c.add(btn2);

}

void loginprocess()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");
        st=cn.createStatement();
        sql="select * from security where user_id='"+ txt1.getText() + "' and password='"
+ txt2.getText() + "'";
        rs=st.executeQuery(sql);
        if(rs.next())
        {
            JOptionPane.showMessageDialog(this,"login
success","login",JOptionPane.INFORMATION_MESSAGE);
            if(mdi!=null)
                mdi.show();
            hide();
        }
        else
            JOptionPane.showMessageDialog(this,"login not
success","login",JOptionPane.WARNING_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"login exception",JOptionPane.ERROR_MESSAGE);
    }
}
public void actionPerformed(ActionEvent e)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(e.getSource()==btn1)
{
    loginprocess();
}
if(e.getSource()==btn2)
{
    System.exit(0);
}
}
public static void main(String args[])
{
    login lg;
    lg=new login(null);
    lg.show();
}
}
```

\*\*\*\*\***END OF LOGIN FORM CODING**\*\*\*\*\*

## MDI FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class pj extends JFrame implements ActionListener
{
    JLabel title,img, lbl,title1,title2;

    JMenuBar mb,m;
    JMenu m1,m2,m3,m4,m5,m6,m7,m8,m9,m10;
    JMenuItem mi,i;
    Container c;
    Connection cn;
    Statement st;
    ResultSet rs;
    int rc, rp;
    String sql;
    pj()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I., GUALA JHARKHAND ");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        setBounds(100,100,600,400);
        c=getContentPane();
        c.setLayout(null);
        img=new JLabel(new ImageIcon("mukesh1.jpe"));
        img.setBounds(0,0,800,560);
        c.add(img);

        mb=new JMenuBar();
        m1=new JMenu("APPLICATION");

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
mb.add(m1);
m2=new JMenu("ACCOUNT");
mb.add(m2);
m3=new JMenu("LOANS");
mb.add(m3);
m4=new JMenu("AGREEMENT");
mb.add(m4);
m5=new JMenu("LOANS_FORM");
mb.add(m5);
m6=new JMenu("SANCTION");
mb.add(m6);
m7=new JMenu("REPAYMENT");
mb.add(m7);
m8=new JMenu("DATABASE");
mb.add(m8);
m9=new JMenu("REPORT");
mb.add(m9);
m10=new JMenu("EXIT");
mb.add(m10);

mi=new JMenuItem("APPLICANT DETAIL");
mi.addActionListener(this);
m1.add(mi);
mi=new JMenuItem("NOMINEES DETAIL");
mi.addActionListener(this);
m1.add(mi);
mi=new JMenuItem("GUARANTOR DETAIL");
mi.addActionListener(this);
m1.add(mi);
mi=new JMenuItem("APPLICANT'S WORKING DETAIL");
mi.addActionListener(this);
m1.add(mi);

mi=new JMenuItem("ACCOUNT DETAIL");
mi.addActionListener(this);
m2.add(mi);

mi=new JMenuItem("LOAN DETAIL");
mi.addActionListener(this);
m3.add(mi);
mi=new JMenuItem("LOAN_TYPE_FORM DETAIL");
mi.addActionListener(this);
m3.add(mi);

mi=new JMenuItem("AGREEMENT DETAIL");
mi.addActionListener(this);
m4.add(mi);
mi=new JMenuItem("AGG_PRO DETAIL");
mi.addActionListener(this);
m4.add(mi);
mi=new JMenuItem("AGG_PART DETAIL");
mi.addActionListener(this);
m4.add(mi);
mi=new JMenuItem("AGG_TYPE_JF DETAIL");
mi.addActionListener(this);
m4.add(mi);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
mi=new JMenuItem("FORM DETAIL");
    mi.addActionListener(this);
m5.add(mi);
mi=new JMenuItem("SANCTION DETAIL");
    mi.addActionListener(this);
m6.add(mi);
mi=new JMenuItem("REPAYMENT DETAIL");
    mi.addActionListener(this);
m7.add(mi);
mi=new JMenuItem("DATABASE_CREATION");
    mi.addActionListener(this);
m8.add(mi);
mi=new JMenuItem("DATABASE_BACKUP");
    mi.addActionListener(this);
m8.add(mi);
mi=new JMenuItem("CHANGE_PASSWORD");
    mi.addActionListener(this);
m8.add(mi);
mi=new JMenuItem("RESTORE_DATABASE");
    mi.addActionListener(this);
m8.add(mi);

mi=new JMenuItem("APPLICANT DETAIL REPORT");
    mi.addActionListener(this);
m9.add(mi);
mi=new JMenuItem("APPLICANT WISE NOMINEES DETAIL REPORT");
    mi.addActionListener(this);
m9.add(mi);
mi=new JMenuItem("APPLICANT WISE ACCOUNT DETAIL REPORT");
    mi.addActionListener(this);
m9.add(mi);
mi=new JMenuItem("APPLICANT WISE FORM DETAIL REPORT");
    mi.addActionListener(this);
m9.add(mi);
mi=new JMenuItem("SANCTION_DETAIL REPORT");      mi.addActionListener(this);
m9.add(mi);
mi=new JMenuItem("REPAYMENT_DETAIL REPORT");
    mi.addActionListener(this);
m9.add(mi);

mi=new JMenuItem("EXIT");
    mi.addActionListener(this);
m10.add(mi);

setJMenuBar(mb);

title=new JLabel("SYSTEM FOR LOAN MANAGEMENT FOR ",JLabel.CENTER);
title.setBounds(10,0,800,260);
title.setFont(new Font("Arial",Font.BOLD,40));
title.setForeground(Color.green);
img.add(title);

title1=new JLabel("THE BRANCH OF S.B.I",JLabel.CENTER);
title1.setBounds(10,0,700,350);
title1.setFont(new Font("Arial",Font.BOLD,30));
title1.setForeground(Color.red);
img.add(title1);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
title2=new JLabel("( GUMLA JHARKHAND )",JLabel.CENTER);
title2.setBounds(10,0,700,450);
title2.setFont(new Font("Arial",Font.BOLD,25));
title2.setForeground(Color.magenta);
img.add(title2);

}

public void actionPerformed(ActionEvent e)
{
    String ac=e.getActionCommand();
    if( ac.equals("LOAN DETAIL"))
    {
        ld1 bl;
        bl=new ld1();
        bl.show();
    }

    if( ac.equals("APPLICANT DETAIL"))
    {
        apd1 a;
        a=new apd1();
        a.show();
    }

    if( ac.equals("NOMINEES DETAIL"))
    {
        nmd1 n;
        n=new nmd1();
        n.show();
    }
    if( ac.equals("GUARANTOR DETAIL"))
    {
        grand g;
        g=new grand ();
        g.show();
    }
    if( ac.equals("APPLICANT'S WORKING DETAIL"))
    {
        awd w;
        w=new awd();
        w.show();
    }
    if( ac.equals("ACCOUNT DETAIL"))
    {
        acd c;
        c=new acd();
        c.show();
    }
    if( ac.equals("AGREEMENT DETAIL"))
    {
        agd d;
        d=new agd();
        d.show();
    }
    if( ac.equals("AGG_PRO DETAIL"))
    {
        apd p;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
p=new apd();
p.show();
}
if( ac.equals("AGG_PART_DETAIL"))
{
apartd r;
r=new apartd();
r.show();
}
if( ac.equals("AGG_TYPE_JF_DETAIL"))
{
atjd j;
j=new atjd();
j.show();
}
if( ac.equals("AGG_TYPE_RULE_DETAIL"))
{
atrd x;
x=new atrd();
x.show();
}
if( ac.equals("FORM_DETAIL"))
{
frmrd m;
m=new frmrd();
m.show();
}
if( ac.equals("LOAN_TYPE_FORM_DETAIL"))
{
ltfd v;
v=new ltfid();
v.show();
}
if( ac.equals("SANCTION_DETAIL"))
{
sanction s;
s=new sanction();
s.show();
}
if( ac.equals("REPAYMENT_DETAIL"))
{
repayment y;
y=new repayment();
y.show();
}
if( ac.equals("APPLICANT_DETAIL_REPORT"))
{
rptApplicant_Detail y;
y=new rptApplicant_Detail();
y.show();
}
if( ac.equals("APPLICANT_WISE_NOMINEES_DETAIL_REPORT"))
{
rptNominees_Detail y;
y=new rptNominees_Detail();
y.show();
}
if( ac.equals("APPLICANT_WISE_ACCOUNT_DETAIL_REPORT"))
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rptAccount_Detail y;
y=new rptAccount_Detail();
y.show();
}
if( ac.equals("APPLICANT WISE FORM DETAIL REPORT"))
{
rptForm_Detail y;
y=new rptForm_Detail();
y.show();
}
if( ac.equals("SANCTION_DETAIL REPORT"))
{
rptSanction_Detail y;
y=new rptSanction_Detail();
y.show();
}
if( ac.equals("REPAYMENT_DETAIL REPORT"))
{
rptRepayment_Detail a;
a=new rptRepayment_Detail();
a.show();
}
if( ac.equals("DATABASE_CREATION"))
{
cdb1 y;
y=new cdb1();
y.show();
}
if( ac.equals("DATABASE_BACKUP"))
{
dbbackup y;
y=new dbbackup();
y.show();
}
if( ac.equals("CHANGE_PASSWORD"))
{
cpw y;
y=new cpw();
y.show();
}
if( ac.equals("RESTORE_DATABASE"))
{
restoredbbackup y;
y=new restoredbbackup();
y.show();
}

if( ac.equals("EXIT"))
{
System.exit( 0 );
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

}

```
public static void main(String args[])
{
    pj mdi;
    login lg;
    splash f;
    f=new splash();
    mdi=new pj();
    lg=new login(mdi);
    lg.show();
}
}
```

\*\*\*\*\***END OF MDI FORM CODING**\*\*\*\*\*

### APPLICANT DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class apd1 extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel
    lbl1,lbl2,lbl3,lbl4,lbl5,lbl6,lbl7,lbl8,lbl9,lbl10,lbl11,lbl12,lbl13,lbl14,lbl15,lblr;
    JTextField
    txt1,txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;
    JComboBox cmbq1,cmbq2,cmbq3;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
    n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    apd1()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : APPLICANT_DETAIL");
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
setBounds(10,10,780,560);
setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
c= getContentPane();
c.setLayout(null);
c.setBackground(Color.black);
title=new JLabel("APPLICANT DETAIL INFORMATION",JLabel.CENTER);
title.setFont(new Font("Arial",Font.BOLD,24));
title.setForeground(Color.green);
title.setBounds(0,0,780,30);
c.add(title);

tab=new JTabbedPane();
tab.setBounds(5,30,760,495);
c.add(tab);

pf=new JPanel();
pf.setLayout(null);
tab.addTab("APPLICANT DETAIL FORM",pf);

lbl1=new JLabel("App_code");
lbl2=new JLabel("App_name");
lbl3=new JLabel("Age");
lbl4=new JLabel("Sex");
lbl5=new JLabel("F_name");
lbl6=new JLabel("Co_So_Reg_No");
lbl7=new JLabel("Address");
lbl8=new JLabel("Phone");
lbl9=new JLabel("Occupation");
lbl10=new JLabel("O_address");
lbl11=new JLabel("O_phone");
lbl12=new JLabel("Emp_code");
lbl13=new JLabel("Salary");
lbl14=new JLabel("D_O_J");
lbl15=new JLabel("D_O_R");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(20,160,120,25);
lbl7.setBounds(20,190,120,25);
lbl8.setBounds(20,220,120,25);
lbl9.setBounds(400,10,120,25);
lbl10.setBounds(400,40,120,25);
lbl11.setBounds(400,70,120,25);
lbl12.setBounds(400,100,120,25);
lbl13.setBounds(400,130,120,25);
lbl14.setBounds(400,160,120,25);
lbl15.setBounds(400,190,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
pf.add(lbl12);
pf.add(lbl13);
pf.add(lbl14);
pf.add(lbl15);

txt1=new JTextField();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();
txt13=new JTextField();
txt14=new JTextField();
txt15=new JTextField();

txt1.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(180,130,180,25);
txt6.setBounds(180,160,180,25);
txt7.setBounds(180,190,180,25);
txt8.setBounds(180,220,180,25);
txt9.setBounds(540,10,180,25);
txt10.setBounds(540,40,180,25);
txt11.setBounds(540,70,180,25);
txt12.setBounds(540,100,180,25);
txt13.setBounds(540,130,180,25);
txt14.setBounds(540,160,180,25);
txt15.setBounds(540,190,180,25);

pf.add(txt1);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);
pf.add(txt13);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf.add(txt14);
pf.add(txt15);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);
btn20.addActionListener(this);

ps.add(btn20);

openrecord();
fillqattribs();
fillqop();
}

void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement	ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from applicant_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
else
{
    rp=0;
    clearrecord();
    showrecstatus();
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    rm=rs.getMetaData();  
    for(i=0;i<rm.getColumnCount();i++)  
        cmbq1.addItem(rm.getColumnName(i+1));  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void fillqop()  
{  
    cmbq2.addItem("=");  
    cmbq2.addItem("<");  
    cmbq2.addItem(">");  
    cmbq2.addItem("<=");  
    cmbq2.addItem(">=");  
    cmbq2.addItem("!=");  
}  
boolean isempty()  
{  
    boolean r=true;  
    try  
    {  
        stt=cn.createStatement();  
        sql="select * from applicant_detail";  
        rst=stt.executeQuery(sql);  
        if(rst.next())  
            r=false;  
    }  
    catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(this,e,"isempty exception"  
,JOptionPane.ERROR_MESSAGE);  
    }  
    return r;  
}  
void showrecord(int rp)  
{  
    try  
    {  
        rs.absolute(rp);  
        rs.moveToCurrentRow();  
        txt1.setText(String.valueOf(rs.getInt("App_code")));  
        txt2.setText(rs.getString("App_name"));  
        txt3.setText(String.valueOf(rs.getInt("Age")));  
        txt4.setText(rs.getString("Sex"));  
        txt5.setText((rs.getString("F_name")));  
        txt6.setText(String.valueOf(rs.getInt("Co_So_Reg_No")));  
        txt7.setText(rs.getString("Address"));  
        txt8.setText(String.valueOf(rs.getInt("Phone")));  
        txt9.setText(rs.getString("Occupation"));  
        txt10.setText(rs.getString("O_address"));  
        txt11.setText(String.valueOf(rs.getInt("O_phone")));  
        txt12.setText(String.valueOf(rs.getInt("Emp_code")));  
        txt13.setText(String.valueOf(rs.getInt("Salary")));  
        txt14.setText(String.valueOf(utility.odate(rs.getDate("D_O_J"))));  
        txt15.setText(String.valueOf(utility.odate(rs.getDate("D_O_R"))));  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
showrecstatus();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}
void clearrecord()
{
txt1.setText("");
txt2.setText("");

txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
txt9.setText("");
txt10.setText("");
txt11.setText("");
txt12.setText("");
txt13.setText("");
txt14.setText("");
txt15.setText("");

}
void showrecstatus()
{
lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();

    rs.updateInt("App_code",Integer.parseInt(txt1.getText()));
    rs.updateString("App_name",txt2.getText());
    rs.updateInt("Age",Integer.parseInt(txt3.getText()));
    rs.updateString("Sex",txt4.getText());
    rs.updateString("F_name",txt5.getText());
    rs.updateInt("Co_So_Reg_No",Integer.parseInt(txt6.getText()));
    rs.updateString("Address",txt7.getText());
    rs.updateInt("Phone",Integer.parseInt(txt8.getText()));
    rs.updateString("Occupation",txt9.getText());
    rs.updateString("O_address",txt10.getText());
    rs.updateInt("O_phone",Integer.parseInt(txt11.getText()));
    rs.updateInt("Emp_code",Integer.parseInt(txt12.getText()));
    rs.updateInt("Salary",Integer.parseInt(txt13.getText()));
    rs.updateDate("D_O_J",utility.jdate(txt14.getText()));
    rs.updateDate("D_O_R",utility.jdate(txt15.getText()));
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.insertRow();
rp=++rc;
showrecstatus();
 JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void refreshrecord()
{
try
{
sql="select * from applicant_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
else
{
    rp=0;
    clearrecord();
    showrecstatus();
}
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
if(rc>0)
{
try
{
    int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
    if(conf==JOptionPane.YES_OPTION)
    {
        rs.deleteRow();
        rc--;
        if(rc==0)
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
        else if(rp>rc)
        {
            rp=rc;
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        showrecord(rp);
    }
    else
        showrecord(rp);
    JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&
cmbq3.getSelectedIndex()>=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from applicant_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + " " + cmbq3.getSelectedItem() + " ";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from applicant_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    rdt[0][i]=cnm[i];
}
for(i=0;i<rct;i++)
{
    rst.absolute(i+1);
    rst.moveToCurrentRow();
    for(j=0;j<cct;j++)
        rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("App_code",Integer.parseInt(txt1.getText()));
    rs.updateString("App_name",txt2.getText());
    rs.updateInt("Age",Integer.parseInt(txt3.getText()));
    rs.updateString("Sex",txt4.getText());
    rs.updateString("F_name",txt5.getText());
    rs.updateInt("Co_So_Reg_No",Integer.parseInt(txt6.getText()));

    rs.updateString("Address",txt7.getText());
    rs.updateInt("Phone",Integer.parseInt(txt8.getText()));
    rs.updateString("Occupation",txt9.getText());
    rs.updateString("O_address",txt10.getText());
    rs.updateInt("O_phone",Integer.parseInt(txt11.getText()));
    rs.updateInt("Emp_code",Integer.parseInt(txt12.getText()));
    rs.updateInt("Salary",Integer.parseInt(txt13.getText()));
    rs.updateDate("D_O_J",utility.jdate(txt14.getText()));
    rs.updateDate("D_O_R",utility.jdate(txt15.getText()));

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(e.getSource()==btn1)  
    {  
        if(rc>0)  
        {  
            rp=1;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn2)  
    {  
        if(rc>0 && rp>1)  
        {  
            rp--;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn3)  
    {  
        if(rc>0 && rp<rc)  
        {  
            rp++;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn4)  
    {  
        if(rc>0)  
        {  
            rp=rc;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn5)  
    {  
        refreshrecord();  
    }  
    if(e.getSource()==btn6)  
    {  
        clearrecord();  
        pm.setVisible(false);  
        pa.setVisible(true);  
    }  
    if(e.getSource()==btn7)  
    {  
        pm.setVisible(false);  
        pe.setVisible(true);  
    }  
    if(e.getSource()==btn8)  
    {  
        deleterecord();  
    }  
    if(e.getSource()==btn9)  
    {  
        tab.setSelectedIndex(1);  
    }  
    if(e.getSource()==btn10)  
    {  
        showgrecord();  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex()>=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from applicant_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        cmbq3.addItem(rst.getObject(1));
        rst.close();
        stt.close();
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
public static void main(String args[])
{
    apd1 f;
    f=new apd1();
    f.show();
}
}
```

\*\*\*\*\*END OF APPLICANT DETAIL FORM CODING\*\*\*\*\*

### NOMINEES DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class nmd1 extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel
    lbl1,lbl2,lbl3,lbl4,lbl5,lbl6,lbl7,lbl8,lbl9,lbl10,lbl11,lbl12,lbl13,lbl14,lbl15,lblr;
    JTextField txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;
    JComboBox cmbq1,cmbq2,cmbq3,cmb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    nmd1()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : NOMINEES_DETAIL");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        c=ContentPane();
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
c.setLayout(null);
c.setBackground(Color.black);
title=new JLabel("NOMINEES DETAIL INFORMATION",JLabel.CENTER);
title.setFont(new Font("Arial",Font.BOLD,24));
title.setForeground(Color.green);
title.setBounds(0,0,780,30);
c.add(title);

tab=new JTabbedPane();
tab.setBounds(5,30,760,495);
c.add(tab);

pf=new JPanel();
pf.setLayout(null);
tab.addTab("NOMINEES DETAIL FORM",pf);

lbl1=new JLabel("App_code");
lbl2=new JLabel("N_name");
lbl3=new JLabel("Age");
lbl4=new JLabel("Sex");
lbl5=new JLabel("F_name");
lbl6=new JLabel("H_address");
lbl7=new JLabel("Occupation");
lbl8=new JLabel("Organization");
lbl9=new JLabel("Address");
lbl10=new JLabel("Phone");
lbl11=new JLabel("Salary");
lbl12=new JLabel("Relation");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(20,160,120,25);
lbl7.setBounds(400,10,120,25);
lbl8.setBounds(400,40,120,25);
lbl9.setBounds(400,70,120,25);
lbl10.setBounds(400,100,120,25);
lbl11.setBounds(400,130,120,25);
lbl12.setBounds(400,160,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
pf.add(lbl12);

cmb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();

cmb.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(180,130,180,25);
txt6.setBounds(180,160,180,25);

txt7.setBounds(540,10,180,25);
txt8.setBounds(540,40,180,25);
txt9.setBounds(540,70,180,25);
txt10.setBounds(540,100,180,25);
txt11.setBounds(540,130,180,25);
txt12.setBounds(540,160,180,25);

cmb.addItemListener(this);

pf.add(cmb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);
btn20.addActionListener(this);

ps.add(btn20);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
openrecord();
fillcombo();
fillqattribs();
fillqop();
}
void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from nominees_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
rp=1;
showrecord(rp);
}
else
{
rp=0;
clearrecord();
showrecstatus();
}
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
stt=cn.createStatement();
sql="select App_code from applicant_detail";
rst=stt.executeQuery(sql);
while(rst.next())
cmb.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rm=rs.getMetaData();
for(i=0;i<rm.getColumnCount();i++)
    cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from nominees_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
        r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}
void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        cmb.setSelectedItem(String.valueOf(rs.getInt("App_code")));
        txt2.setText(rs.getString("N_name"));
        txt3.setText(String.valueOf(rs.getInt("Age")));
        txt4.setText(rs.getString("Sex"));
        txt5.setText((rs.getString("F_name")));
        txt6.setText(rs.getString("H_address"));
        txt7.setText(rs.getString("Occupation"));
        txt8.setText(rs.getString("Organization"));
        txt9.setText(rs.getString("Address"));
        txt10.setText(String.valueOf(rs.getInt("Phon")));
        txt11.setText(String.valueOf(rs.getInt("Salary")));
        txt12.setText(rs.getString("Relation"));

        showrecstatus();
    }
    catch(Exception e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JOptionPane.showMessageDialog(this,e,"saverecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
  
}  
void clearrecord()  
{  
  
txt2.setText("");  
txt3.setText("");  
txt4.setText("");  
txt5.setText("");  
txt6.setText("");  
txt7.setText("");  
txt8.setText("");  
txt9.setText("");  
txt10.setText("");  
txt11.setText("");  
txt12.setText("");  
  
}  
void showrecstatus()  
{  
    lblrs.setText(rp + "/" + rc);  
}  
void saverecord()  
{  
    try  
    {  
        rs.moveToInsertRow();  
  
        rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));  
        rs.updateString("N_name",txt2.getText());  
        rs.updateInt("Age",Integer.parseInt(txt3.getText()));  
        rs.updateString("Sex",txt4.getText());  
        rs.updateString("F_name",txt5.getText());  
        rs.updateString("H_address",txt6.getText());  
        rs.updateString("Occupation",txt7.getText());  
        rs.updateString("Organization",txt8.getText());  
        rs.updateString("Address",txt9.getText());  
        rs.updateInt("Phon",Integer.parseInt(txt10.getText()));  
        rs.updateInt("Salary",Integer.parseInt(txt11.getText()));  
        rs.updateString("Relation",txt12.getText());  
  
        rs.insertRow();  
        rp=++rc;  
        showrecstatus();  
        JOptionPane.showMessageDialog(this,"record saved","save result"  
,JOptionPane.INFORMATION_MESSAGE);  
    }  
    catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(this,e,"saverecord exception"  
,JOptionPane.ERROR_MESSAGE);  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void refreshrecord()
{
    try
    {
        sql="select * from nominees_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
, JOptionPane.ERROR_MESSAGE);
    }
}
void deleterecord()
{
    if(rc>0)
    {
        try
        {
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
            if(conf==JOptionPane.YES_OPTION)
            {
                rs.deleteRow();
                rc--;
                if(rc==0)
                {
                    rp=0;
                    clearrecord();
                    showrecstatus();
                }
                else if(rp>rc)
                {
                    rp=rc;
                    showrecord(rp);
                }
                else
                    showrecord(rp);
                JOptionPane.showMessageDialog(this,"record deleted","delete result"
, JOptionPane.INFORMATION_MESSAGE);
            }
        }
        catch(Exception e)
        {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex() >=0 && cmbq2.getSelectedIndex() >=0 &&
cmbq3.getSelectedIndex() >=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from nominees_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + " " + cmbq3.getSelectedItem() + " ";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from nominees_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rct;i++)
    {
        rst.absolute(i+1);
        rst.moveToCurrentRow();
        for(j=0;j<cct;j++)
            rdt[i+1][j]=rst.getObject(j+1);
    }
    if(ts!=null) ps.remove(ts);

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("N_name",txt2.getText());
    rs.updateInt("Age",Integer.parseInt(txt3.getText()));
    rs.updateString("Sex",txt4.getText());
    rs.updateString("F_name",txt5.getText());
    rs.updateString("H_address",txt6.getText());
    rs.updateString("Occupation",txt7.getText());
    rs.updateString("Organization",txt8.getText());
    rs.updateString("Address",txt9.getText());
    rs.updateInt("Phon",Integer.parseInt(txt10.getText()));
    rs.updateInt("Salary",Integer.parseInt(txt11.getText()));
    rs.updateString("Relation",txt12.getText());

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    rp--;
    showrecord(rp);
}
}
if(e.getSource()==btn3)
{
    if(rc>0 && rp<rc)
    {
        rp++;
        showrecord(rp);
    }
}
if(e.getSource()==btn4)
{
    if(rc>0)
    {
        rp=rc;
        showrecord(rp);
    }
}
if(e.getSource()==btn5)
{
    refreshrecord();
}
if(e.getSource()==btn6)
{
    clearrecord();
    pm.setVisible(false);
    pa.setVisible(true);
}
if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}
if(e.getSource()==btn8)
{
    deleterecord();
}
if(e.getSource()==btn9)
{
    tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}

public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex()>=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from nominees_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}

public static void main(String args[])
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    nmd1 f;  
    f=new nmd1();  
    f.show();  
}  
}  
}
```

\*\*\*\*\*END OF NOMINEES DETAIL FORM CODING\*\*\*\*\*

### GUARANTOR DETAIL FORM CODING

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.*;  
import java.sql.*;  
class grand extends JFrame implements ActionListener,ItemListener  
{  
    JLabel title, lblq1, lblq2, lblq3;  
    JLabel  
    lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lbl11, lbl12, lbl13, lbl14, lbl15, lblrs;  
    JTextField  
    txt1, txt2, txt3, txt4, txt5, txt6, txt7, txt8, txt9, txt10, txt11, txt12, txt13, txt14, txt15;  
    JComboBox cmbq1, cmbq2, cmbq3, cmb;  
    JButton  
    btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btn10, btn11, btn12, btn13, btn14, btn15, btn16, bt  
n17, btn18, btn19, btn20;  
    JTabbedPane tab;  
    JPanel pf, pm, pa, pe, pq, ps;  
    Container c;  
  
    Connection cn;  
    Statement st, stt;  
    ResultSet rs, rst;  
    ResultSetMetaData rm;  
    int rp, rc, i, j, cct, rct;  
    String sql;  
    JTable ts;  
    Object cnm[], rdt[][][];  
    grand()  
    {  
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : GUARANTOR_DETAIL");  
        setBounds(10,10,780,560);  
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);  
        c= getContentPane();  
        c.setLayout(null);  
  
        c.setBackground(Color.black);  
        title=new JLabel("GUARANTOR DETAIL INFORMATION",JLabel.CENTER);  
        title.setFont(new Font("Arial",Font.BOLD,24));  
        title.setForeground(Color.green);  
        title.setBounds(0,0,780,30);  
        c.add(title);  
  
        tab=new JTabbedPane();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab.setBounds(5,30,760,495);
c.addTab(tab);

pf=new JPanel();
pf.setLayout(null);
tab.addTab("GUARANTOR DETAIL FORM",pf);

lbl1=new JLabel("Index no");
lbl2=new JLabel("App_code");
lbl3=new JLabel("G_name");
lbl4=new JLabel("Age");
lbl5=new JLabel("Sex");
lbl6=new JLabel("F_name");
lbl7=new JLabel("H_address");
lbl8=new JLabel("Occupation");
lbl9=new JLabel("Organization");
lbl10=new JLabel("Address");
lbl11=new JLabel("Phone");
lbl12=new JLabel("Salary");
lbl13=new JLabel("Relation");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(20,160,120,25);
lbl7.setBounds(20,190,120,25);
lbl8.setBounds(400,10,120,25);
lbl9.setBounds(400,40,120,25);
lbl10.setBounds(400,70,120,25);
lbl11.setBounds(400,100,120,25);
lbl12.setBounds(400,130,120,25);
lbl13.setBounds(400,160,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
pf.add(lbl12);
pf.add(lbl13);

txt1=new JTextField();
cmb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();

txt1.setBounds(180,10,180,25);

cmb.setBounds(180,40,180,25);
txt2.setBounds(180,70,180,25);
txt3.setBounds(180,100,180,25);
txt4.setBounds(180,130,180,25);
txt5.setBounds(180,160,180,25);
txt6.setBounds(180,190,180,25);
txt7.setBounds(540,10,180,25);
txt8.setBounds(540,40,180,25);
txt9.setBounds(540,70,180,25);
txt10.setBounds(540,100,180,25);
txt11.setBounds(540,130,180,25);
txt12.setBounds(540,160,180,25);

cmb.addItemListener(this);
pf.add(cmb);
pf.add(txt1);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
 pq=new JPanel();
 pq.setLayout(null);
 tab.addTab("query",pq);

 lblq1 = new JLabel("Query Attributes");
 lblq2 = new JLabel("Query Op.");
 lblq3 = new JLabel("Query Data");

 lblq1.setBounds(10,4,120,25);
 lblq2.setBounds(140,4,80,25);
 lblq3.setBounds(230,4,160,25);

 pq.add(lblq1);
 pq.add(lblq2);
 pq.add(lblq3);

 cmbq1 = new JComboBox();
 cmbq2 = new JComboBox();
 cmbq3 = new JComboBox();

 cmbq1.setBounds(10,34,120,25);
 cmbq2.setBounds(140,34,80,25);
 cmbq3.setBounds(230,34,160,25);

 pq.add(cmbq1);
 pq.add(cmbq2);
 pq.add(cmbq3);

 cmbq1.addItemListener(this);

 btn18 = new JButton("search");
 btn19 = new JButton("return");

 btn18.setBounds(420,30,80,30);
 btn19.setBounds(520,30,80,30);

 btn18.addActionListener(this);
 btn19.addActionListener(this);

 pq.add(btn18);
 pq.add(btn19);

 ps=new JPanel();
 ps.setLayout(null);
 tab.addTab("show",ps);

 btn20 = new JButton("return");

 btn20.setBounds(520,30,80,30);

 btn20.addActionListener(this);

 ps.add(btn20);

 openrecord();
 fillcombo();
 fillqattribs();
 fillqop();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from guarantor_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select App_code from applicant_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbql.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
void fillqop()  
{  
    cmbq2.addItem("=");  
    cmbq2.addItem("<");  
    cmbq2.addItem(">");  
    cmbq2.addItem("<=");  
    cmbq2.addItem(">=");  
    cmbq2.addItem("!=");  
}  
boolean isempty()  
{  
    boolean r=true;  
    try  
{  
        stt=cn.createStatement();  
        sql="select * from guarantor_detail";  
        rst=stt.executeQuery(sql);  
        if(rst.next())  
            r=false;  
    }  
    catch(Exception e)  
{  
        JOptionPane.showMessageDialog(this,e,"isempty exception"  
,JOptionPane.ERROR_MESSAGE);  
    }  
    return r;  
}  
void showrecord(int rp)  
{  
    try  
{  
        rs.absolute(rp);  
        rs.moveToCurrentRow();  
        txt1.setText(String.valueOf(rs.getInt("Index_no")));  
        cmb.setSelectedItem(String.valueOf(rs.getInt("App_code")));  
        txt2.setText(rs.getString("G_name"));  
        txt3.setText(String.valueOf(rs.getInt("Age")));  
        txt4.setText(rs.getString("Sex"));  
        txt5.setText(rs.getString("F_name"));  
        txt6.setText((rs.getString("H_address")));  
        txt7.setText(rs.getString("Occupation"));  
        txt8.setText(rs.getString("Organization"));  
        txt9.setText(rs.getString("Address"));  
        txt10.setText(String.valueOf(rs.getInt("Phone")));  
        txt11.setText(String.valueOf(rs.getInt("Salary")));  
        txt12.setText(rs.getString("Relation"));  
  
        showrecstatus();  
    }  
    catch(Exception e)  
{  
        JOptionPane.showMessageDialog(this,e,"saverecord exception"  
,JOptionPane.ERROR_MESSAGE);  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void clearrecord()
{
    txt1.setText("");
    txt2.setText("");
    txt3.setText("");
    txt4.setText("");
    txt5.setText("");
    txt6.setText("");
    txt7.setText("");
    txt8.setText("");
    txt9.setText("");
    txt10.setText("");
    txt11.setText("");
    txt12.setText("");
}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}

void saverecord()
{
    try
    {
        rs.moveToInsertRow();

        rs.updateInt("App_code", Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.updateInt("Index_no", Integer.parseInt(txt1.getText()));
        rs.updateString("G_name", txt2.getText());
        rs.updateInt("Age", Integer.parseInt(txt3.getText()));
        rs.updateString("Sex", txt4.getText());
        rs.updateString("F_name", txt5.getText());
        rs.updateString("H_address", txt6.getText());
        rs.updateString("Occupation", txt7.getText());
        rs.updateString("Organization", txt8.getText());
        rs.updateString("Address", txt9.getText());
        rs.updateInt("Phone", Integer.parseInt(txt10.getText()));
        rs.updateInt("Salary", Integer.parseInt(txt11.getText()));
        rs.updateString("Relation", txt12.getText());

        rs.insertRow();
        rp++;
        showrecstatus();
        JOptionPane.showMessageDialog(this, "record saved", "save result"
, JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this, e, "saverecord exception"
, JOptionPane.ERROR_MESSAGE);
    }
}

void refreshrecord()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    sql="select * from guarantor_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())
    {
        rp=1;
        showrecord(rp);
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
    if(rc>0)
    {
        try
        {
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
            if(conf==JOptionPane.YES_OPTION)
            {
                rs.deleteRow();
                rc--;
                if(rc==0)
                {
                    rp=0;
                    clearrecord();
                    showrecstatus();
                }
                else if(rp>rc)
                {
                    rp=rc;
                    showrecord(rp);
                }
                else
                    showrecord(rp);
                JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
            }
        }
        catch(Exception e)
        {
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void searchrecord()
{
    if(cmbq1.getSelectedIndex() >=0 && cmbq2.getSelectedIndex() >=0 &&
cmbq3.getSelectedIndex() >=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from nominees_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "" + cmbq3.getSelectedItem() + "";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}

void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
        sql="select * from guarantor_detail";
        rst=stt.executeQuery(sql);
        rct=0;
        while(rst.next()) rct++;
        rm=rst.getMetaData();
        cct=rm.getColumnCount();
        rdt=new Object[rct+1][cct];
        cnm=new Object[cct];
        for(i=0;i<cct;i++)
        {
            cnm[i]=rm.getColumnName(i+1);
            rdt[0][i]=cnm[i];
        }
        for(i=0;i<rct;i++)
        {
            rst.absolute(i+1);
            rst.moveToCurrentRow();
            for(j=0;j<cct;j++)
                rdt[i+1][j]=rst.getObject(j+1);
        }
        if(ts!=null) ps.remove(ts);
        ts=new JTable(rdt,cnm);
        ts.setBounds(10,60,500,360);
        ps.add(ts);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("Index_no",Integer.parseInt(txt1.getText()));
    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("G_name",txt2.getText());
    rs.updateInt("Age",Integer.parseInt(txt3.getText()));
    rs.updateString("Sex",txt4.getText());
    rs.updateString("F_name",txt5.getText());
    rs.updateString("H_address",txt6.getText());
    rs.updateString("Occupation",txt7.getText());
    rs.updateString("Organization",txt8.getText());
    rs.updateString("Address",txt9.getText());
    rs.updateInt("Phone",Integer.parseInt(txt10.getText()));
    rs.updateInt("Salary",Integer.parseInt(txt11.getText()));
    rs.updateString("Relation",txt12.getText());

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}

public void actionPerformed(ActionEvent e)
{
if(e.getSource()==btn1)
{
    if(rc>0)
    {
        rp=1;
        showrecord(rp);
    }
}
if(e.getSource()==btn2)
{
    if(rc>0 && rp>1)
    {
        rp--;
        showrecord(rp);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        }
    }
    if(e.getSource()==btn3)
    {
        if(rc>0 && rp<rc)
        {
            rp++;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn4)
    {
        if(rc>0)
        {
            rp=rc;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn5)
    {
        refreshrecord();
    }
    if(e.getSource()==btn6)
    {
        clearrecord();
        pm.setVisible(false);
        pa.setVisible(true);
    }
    if(e.getSource()==btn7)
    {
        pm.setVisible(false);
        pe.setVisible(true);
    }
    if(e.getSource()==btn8)
    {
        deleterecord();
    }
    if(e.getSource()==btn9)
    {
        tab.setSelectedIndex(1);
    }
    if(e.getSource()==btn10)
    {
        showgrecord();
        tab.setSelectedIndex(2);
    }
    if(e.getSource()==btn11)
    {
        setVisible(false);
    }
    if(e.getSource()==btn12)
    {
        saverecord();
    }
    if(e.getSource()==btn13)
    {
        clearrecord();
    }
    if(e.getSource()==btn14)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn15)  
{  
    updaterecord();  
}  
if(e.getSource()==btn16)  
{  
    restorerecord();  
}  
if(e.getSource()==btn17)  
{  
    pe.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn18)  
{  
    searchrecord();  
}  
if(e.getSource()==btn19)  
{  
    tab.setSelectedIndex(0);  
}  
if(e.getSource()==btn20)  
{  
    tab.setSelectedIndex(0);  
}  
}  
public void itemStateChanged(ItemEvent e)  
{  
    if(e.getSource()==cmbq1)  
    {  
        if(cmbq1.getSelectedIndex() >=0)  
        {  
            try  
            {  
                stt=cn.createStatement();  
                sql="select distinct " + cmbq1.getSelectedItem() + " from guarantor_detail";  
                rst=stt.executeQuery(sql);  
                cmbq3.removeAllItems();  
                while(rst.next())  
                    cmbq3.addItem(rst.getObject(1));  
                rst.close();  
                stt.close();  
            }  
            catch(Exception ex)  
            {  
                JOptionPane.showMessageDialog(this,ex,"query exception"  
,JOptionPane.ERROR_MESSAGE);  
            }  
        }  
    }  
}  
public static void main(String args[])  
{  
    grand f;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
f=new grand();
f.show();
}
}
```

\*\*\*\*\*END OF GUARANTOR FORM CODING\*\*\*\*\*

### APPLICANT'S WORKING DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class awd extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel
    JTextField txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;
    JComboBox cmbq1,cmbq2,cmbq3,cmb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    awd()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : APPLICANT'S
WORKING_DETAIL");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        c=ContentPane();
        c.setLayout(null);
        c.setBackground(Color.black);
        title=new JLabel("APPLICANT'S WORKING DETAIL INFORMATION",JLabel.CENTER);
        title.setFont(new Font("Arial",Font.BOLD,24));
        title.setForeground(Color.green);
        title.setBounds(0,0,780,30);
        c.add(title);

        tab=new JTabbedPane();
        tab.setBounds(5,30,760,495);
        c.addTab(tab,"AP.WORK_DETAIL FORM",pf);

        pf=new JPanel();
        pf.setLayout(null);
        tab.addTab("AP.WORK_DETAIL FORM",pf);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl1=new JLabel("App_code");
lbl2=new JLabel(" Loan type");
lbl3=new JLabel("Firm name");
lbl4=new JLabel("Firm address");
lbl5=new JLabel("Firm phone");

lbl6=new JLabel("Monthly income");
lbl7=new JLabel("Annual income");
lbl8=new JLabel("Starting date");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(400,10,120,25);
lbl6.setBounds(400,40,120,25);
lbl7.setBounds(400,70,120,25);
lbl8.setBounds(400,100,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
```

```
cmb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
```

```
cmb.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(540,10,180,25);
txt6.setBounds(540,40,180,25);
txt7.setBounds(540,70,180,25);
txt8.setBounds(540,100,180,25);
```

```
cmb.addItemListener(this);

pf.add(cmb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");
btn20.setBounds(520,30,80,30);
btn20.addActionListener(this);
ps.add(btn20);

openrecord();
fillcombo();
fillqattribs();
fillqop();
}
void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement	ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from applicant_working_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
rp=1;
showrecord(rp);
}
else
{
rp=0;
clearrecord();
showrecstatus();
}
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillcombo()
{
try
{
stt=cn.createStatement();
sql="select App_code from applicant_detail";
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rst=stt.executeQuery(sql);
while(rst.next())
cmb.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from applicant_working_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
    catch(Exception e)
    {

        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}
void showrecord(int rp)
{
    try
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.absolute(rp);
rs.moveToCurrentRow();
cmb.setSelectedItem(String.valueOf(rs.getInt("App_code")));
txt2.setText(rs.getString("Type"));
txt3.setText(rs.getString("Firm_name"));
txt4.setText(rs.getString("Firm_address"));
txt5.setText(String.valueOf(rs.getInt("Firm_phone")));
txt6.setText(String.valueOf(rs.getInt("Monthly_income")));
txt7.setText(String.valueOf(rs.getInt("Annual_income")));
txt8.setText(String.valueOf(utility.odate(rs.getDate("Starting_date"))));
showrecstatus();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}
void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
}
void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();
    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("Type",txt2.getText());
    rs.updateString("Firm_name",txt3.getText());
    rs.updateString("Firm_address",txt4.getText());
    rs.updateInt("Firm_phone",Integer.parseInt(txt5.getText()));
    rs.updateInt("Monthly_income",Integer.parseInt(txt6.getText()));
    rs.updateInt("Annual_income",Integer.parseInt(txt7.getText()));
    rs.updateDate("Starting_date",utility.jdate(txt8.getText()));

    rs.insertRow();
    rp=++rc;
    showrecstatus();
    JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JOptionPane.showMessageDialog(this,e,"saverecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
void refreshrecord()  
{  
try  
{  
    sql="select * from applicant_working_detail";  
    rs=st.executeQuery(sql);  
    rc=0;  
    while(rs.next()) rc++;  
    if(!isempty())  
    {  
        rp=1;  
        showrecord(rp);  
    }  
    else  
    {  
        rp=0;  
        clearrecord();  
        showrecstatus();  
    }  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void deleterecord()  
{  
if(rc>0)  
{  
try  
{  
    int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this  
record?","delete confirmation",JOptionPane.YES_NO_OPTION);  
    if(conf==JOptionPane.YES_OPTION)  
    {  
        rs.deleteRow();  
        rc--;  
        if(rc==0)  
        {  
            rp=0;  
            clearrecord();  
            showrecstatus();  
        }  
        else if(rp>rc)  
        {  
            rp=rc;  
            showrecord(rp);  
        }  
        else  
            showrecord(rp);  
        JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex() >=0 && cmbq2.getSelectedIndex() >=0 &&
cmbq3.getSelectedIndex() >=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from applicant_working_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + " " + cmbq3.getSelectedItem() + " ";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
        sql="select * from applicant_working_detail";
        rst=stt.executeQuery(sql);
        rct=0;
        while(rst.next()) rct++;
        rm=rst.getMetaData();
        cct=rm.getColumnCount();
        rdt=new Object[rct+1][cct];
        cnm=new Object[cct];
        for(i=0;i<cct;i++)
        {
            cnm[i]=rm.getColumnName(i+1);
            rdt[0][i]=cnm[i];
        }
        for(i=0;i<rct;i++)
        {

            rst.absolute(i+1);
            rst.moveToCurrentRow();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
for(j=0;j<cct;j++)
    rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("Type",txt2.getText());

    rs.updateString("Firm_name",txt3.getText());
    rs.updateString("Firm_address",txt4.getText());
    rs.updateInt("Firm_phone",Integer.parseInt(txt5.getText()));
    rs.updateInt("Monthly_income",Integer.parseInt(txt6.getText()));
    rs.updateInt("Annual_income",Integer.parseInt(txt7.getText()));
    rs.updateDate("Starting_date",utility.jdate(txt8.getText()));

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    showrecord(rp);
}
}
if(e.getSource()==btn3)
{
    if(rc>0 && rp<rc)
    {
        rp++;
        showrecord(rp);
    }
}
if(e.getSource()==btn4)
{
    if(rc>0)
    {
        rp=rc;
        showrecord(rp);
    }
}
if(e.getSource()==btn5)
{
    refreshrecord();
}

if(e.getSource()==btn6)
{
    clearrecord();
    pm.setVisible(false);
    pa.setVisible(true);
}
if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}
if(e.getSource()==btn8)
{
    deleterecord();
}
if(e.getSource()==btn9)
{
    tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);

    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}

public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex()>=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from
applicant_working_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

public static void main(String args[])
{
    awd f;
    f=new awd();
    f.show();
}

*****END OF APPLICANT WORKING DETAIL FORM CODING*****
```

### ACCOUNT DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class acd extends JFrame implements ActionListener,ItemListener
{
    JLabel title, lblq1, lblq2, lblq3;
    JLabel
    lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lbl11, lbl12, lbl13, lbl14, lbl15, lblrs;
    JTextField txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;
    JComboBox cmbq1,cmbq2,cmbq3,cmb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,btn17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    acd()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : ACCOUNT_DETAIL");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        c=ContentPane();
        c.setLayout(null);
        c.setBackground(Color.black);
        title=new JLabel("ACCOUNT DETAIL INFORMATION",JLabel.CENTER);
        title.setFont(new Font("Arial",Font.BOLD,24));
        title.setForeground(Color.green);
        title.setBounds(0,0,780,30);
        c.add(title);

        tab=new JTabbedPane();
        tab.setBounds(5,30,760,495);
        c.add(tab);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf=new JPanel();
pf.setLayout(null);
tab.addTab("ACCOUNT DETAIL FORM",pf);

lbl1=new JLabel("App_code");
lbl2=new JLabel("Ac_Id");
lbl3=new JLabel("Date of openning");
lbl4=new JLabel("App address");
lbl5=new JLabel("Deposit amount");
lbl6=new JLabel("Deposit date");
lbl7=new JLabel("Credit amount");
lbl8=new JLabel("Creadit date");
lbl9=new JLabel("Balance amount");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(400,10,120,25);
lbl7.setBounds(400,40,120,25);
lbl8.setBounds(400,70,120,25);
lbl9.setBounds(400,100,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
```

```
cmb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();
```

```
cmb.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(180,130,180,25);

txt6.setBounds(540,10,180,25);
txt7.setBounds(540,40,180,25);
txt8.setBounds(540,70,180,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt9.setBounds(540,100,180,25);

cmb.addItemListener(this);

pf.add(cmb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);

btn20.addActionListener(this);

ps.add(btn20);

openrecord();
fillcombo();
fillqattribs();
fillqop();
}
void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement	ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from account_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
rp=1;
showrecord(rp);
}
else
{
rp=0;
clearrecord();
showrecstatus();
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        }
    }
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select App_code from applicant_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from account_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
r=false;
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
}
return r;
}
void showrecord(int rp)
{
try
{
    rs.absolute(rp);
    rs.moveToCurrentRow();
    cmb.setSelectedItem(String.valueOf(rs.getInt("App_code")));
    txt2.setText(rs.getString("Ac_Id"));
    txt3.setText(String.valueOf(utilityodate(rs.getDate("Date_o_openning"))));
    txt4.setText(rs.getString("App_address"));
    txt5.setText(String.valueOf(rs.getInt("Deposit_amount")));
    txt6.setText(String.valueOf(utilityodate(rs.getDate("Deposit_date"))));
    txt7.setText(String.valueOf(rs.getInt("Credit_amount")));
    txt8.setText(String.valueOf(utilityodate(rs.getDate("Credit_date"))));
    txt9.setText(String.valueOf(rs.getInt("Balance_amount")));
    showrecstatus();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}
void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
txt9.setText("");
txt10.setText("");
txt11.setText("");
txt12.setText("");

}
void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.updateInt("App_code", Integer.parseInt(cmb.getSelectedItem().toString()));
rs.updateInt("Ac_Id", Integer.parseInt(txt2.getText()));
rs.updateDate("Date_o_openning", utility.jdate(txt3.getText()));
rs.updateString("App_address", txt4.getText());
rs.updateInt("Deposit_amount", Integer.parseInt(txt5.getText()));
rs.updateDate("Deposit_date", utility.jdate(txt6.getText()));
rs.updateInt("Credit_amount", Integer.parseInt(txt7.getText()));
rs.updateDate("Credit_date", utility.jdate(txt8.getText()));
rs.updateInt("Balance_amount", Integer.parseInt(txt9.getText()));

rs.insertRow();
rp=++rc;
showrecstatus();
 JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void refreshrecord()
{
try
{
    sql="select * from account_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())
    {
        rp=1;
        showrecord(rp);
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
if(rc>0)
{
try
{
    int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
    if(conf==JOptionPane.YES_OPTION)
    {

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.deleteRow();
rc--;
if(rc==0)
{
    rp=0;
    clearrecord();
    showrecstatus();
}
else if(rp>rc)
{
    rp=rc;
    showrecord(rp);
}
else
    showrecord(rp);
 JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&
cmbq3.getSelectedIndex()>=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from account_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "!" + cmbq3.getSelectedItem() + "!";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
    try
    {
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
sql="select * from account_detail";
rst=stt.executeQuery(sql);
rct=0;
while(rst.next()) rct++;
rm=rst.getMetaData();
cct=rm.getColumnCount();
rdt=new Object[rct+1][cct];
cnm=new Object[cct];
for(i=0;i<cct;i++)
{
    cnm[i]=rm.getColumnName(i+1);
    rdt[0][i]=cnm[i];
}
for(i=0;i<rct;i++)
{
    rst.absolute(i+1);
    rst.moveToCurrentRow();
    for(j=0;j<cct;j++)
        rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();

    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateInt("Ac_Id",Integer.parseInt(txt2.getText()));
    rs.updateDate("Date_o_openning",utility.jdate(txt3.getText()));
    rs.updateString("App_address",txt4.getText());
    rs.updateInt("Deposit_amount",Integer.parseInt(txt5.getText()));
    rs.updateDate("Deposit_date",utility.jdate(txt6.getText()));
    rs.updateInt("Credit_amount",Integer.parseInt(txt7.getText()));
    rs.updateDate("Credit_date",utility.jdate(txt8.getText()));
    rs.updateInt("Balance_amount",Integer.parseInt(txt9.getText()));

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
if(e.getSource()==btn1)
{
if(rc>0)
{
rp=1;
showrecord(rp);
}
}
if(e.getSource()==btn2)
{
if(rc>0 && rp>1)
{
rp--;
showrecord(rp);
}
}
if(e.getSource()==btn3)
{
if(rc>0 && rp<rc)
{
rp++;
showrecord(rp);
}
}
if(e.getSource()==btn4)
{
if(rc>0)
{
rp=rc;
showrecord(rp);
}
}
if(e.getSource()==btn5)
{
refreshrecord();
}
if(e.getSource()==btn6)
{
clearrecord();
pm.setVisible(false);
pa.setVisible(true);
}
if(e.getSource()==btn7)
{
pm.setVisible(false);
pe.setVisible(true);
}
if(e.getSource()==btn8)
{
deleterecord();
}
if(e.getSource()==btn9)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
stt=cn.createStatement();
sql="select distinct " + cmbq1.getSelectedItem() + " from account_detail";
rst=stt.executeQuery(sql);
cmbq3.removeAllItems();
while(rst.next())
    cmbq3.addItem(rst.getObject(1));
rst.close();
stt.close();
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
}
}
}
public static void main(String args[])
{
    acd f;
    f=new acd();
    f.show();
}
}
```

\*\*\*\*\*END OF ACCOUNT DETAIL FORM CODING\*\*\*\*\*

## LOAN DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class ld1 extends JFrame implements ActionListener,ItemListener
{
    JLabel title, lblq1, lblq2, lblq3;
    JLabel lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lblrs;
    JTextField txt1,txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10;
    JComboBox cmbq1,cmbq2,cmbq3;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,btn17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    ld1()
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I :LOAN_DETAIL");
setBounds(10,10,780,560);
setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
c= getContentPane();
c.setLayout(null);
c.setBackground(Color.black);
title=new JLabel("LOAN DETAIL INFORMATION",JLabel.CENTER);
title.setFont(new Font("Arial",Font.BOLD,24));
title.setForeground(Color.green);
title.setBounds(0,0,780,30);
c.add(title);

tab=new JTabbedPane();
tab.setBounds(5,30,760,495);
c.add(tab);

pf=new JPanel();
pf.setLayout(null);
tab.addTab("LOAN DETAIL FORM",pf);

lbl1=new JLabel("Sl_no");
lbl2=new JLabel("Loan Type");
lbl3=new JLabel("Purpose");
lbl4=new JLabel("Eligibility");
lbl5=new JLabel("Amount");
lbl6=new JLabel("margin");
lbl7=new JLabel("Fee");
lbl8=new JLabel("Repayment");
lbl9=new JLabel("interest rate");
lbl10=new JLabel("Security");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(400,10,120,25);
lbl7.setBounds(400,40,120,25);
lbl8.setBounds(400,70,120,25);
lbl9.setBounds(400,100,120,25);
lbl10.setBounds(400,130,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);

txt1=new JTextField();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();

txt1.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(180,130,180,25);
txt6.setBounds(540,10,180,25);
txt7.setBounds(540,40,180,25);
txt8.setBounds(540,70,180,25);
txt9.setBounds(540,100,180,25);
txt10.setBounds(540,130,180,25);

pf.add(txt1);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);

pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);

pm=new JPanel();
pm.setBounds(40,160,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,160,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,160,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pq=new JPanel();
    pq.setLayout(null);
    tab.addTab("query",pq);

    lblq1 = new JLabel("Query Attributes");
    lblq2 = new JLabel("Query Op.");
    lblq3 = new JLabel("Query Data");

    lblq1.setBounds(10,4,120,25);
    lblq2.setBounds(140,4,80,25);
    lblq3.setBounds(230,4,160,25);

    pq.add(lblq1);
    pq.add(lblq2);
    pq.add(lblq3);

    cmbq1 = new JComboBox();
    cmbq2 = new JComboBox();
    cmbq3 = new JComboBox();

    cmbq1.setBounds(10,34,120,25);
    cmbq2.setBounds(140,34,80,25);
    cmbq3.setBounds(230,34,160,25);

    pq.add(cmbq1);
    pq.add(cmbq2);
    pq.add(cmbq3);

    cmbq1.addItemListener(this);

    btn18 = new JButton("search");
    btn19 = new JButton("return");

    btn18.setBounds(420,30,80,30);
    btn19.setBounds(520,30,80,30);

    btn18.addActionListener(this);
    btn19.addActionListener(this);

    pq.add(btn18);
    pq.add(btn19);

    ps=new JPanel();
    ps.setLayout(null);
    tab.addTab("show",ps);

    btn20 = new JButton("return");

    btn20.setBounds(520,30,80,30);

    btn20.addActionListener(this);

    ps.add(btn20);

    openrecord();
    fillqattribs();
    fillqop();
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn", "mukesh", "dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from loan_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void fillqattribs()
{
    try
    {
        rm=rs.getMetaData();
        for(i=0;i<rm.getColumnCount();i++)
            cmbq1.addItem(rm.getColumnName(i+1));
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"fillqattribs exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from loan_detail";
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rst=stt.executeQuery(sql);
if(rst.next())
r=false;
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
}
return r;
}
void showrecord(int rp)
{
try
{
    rs.absolute(rp);
    rs.moveToCurrentRow();
    txt1.setText(rs.getString("Sl_no"));
    txt2.setText(rs.getString("Type"));
    txt3.setText(rs.getString("Purpose"));
    txt4.setText(rs.getString("Eligibility"));
    txt5.setText(String.valueOf(rs.getInt("Amounnt")));
    txt6.setText(rs.getString("Margine"));
    txt7.setText(String.valueOf(rs.getInt("Fee")));
    txt8.setText(rs.getString("Repayment"));
    txt9.setText(rs.getString("Interest_Rate"));
    txt10.setText(rs.getString("Security"));

    showrecstatus();

}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"showrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void clearrecord()
{
txt1.setText("");
txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
txt9.setText("");
txt10.setText("");

}
void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    rs.moveToInsertRow();

        rs.updateInt("Sl_no", Integer.parseInt(txt1.getText()));
        rs.updateString("Type", txt2.getText());
        rs.updateString("Purpose", txt3.getText());
        rs.updateString("Eligibility", txt4.getText());
        rs.updateInt("Amount", Integer.parseInt(txt5.getText()));
        rs.updateString("Margin", txt6.getText());
        rs.updateInt("Fee", Integer.parseInt(txt7.getText()));
        rs.updateString("Repayment", txt8.getText());
        rs.updateString("Interest_rate", txt9.getText());
        rs.updateString("Security", txt10.getText());
    rs.insertRow();
    rp=++rc;
    showrecstatus();
    JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void refreshrecord()
{
    try
    {
        sql="select * from loan_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void deleterecord()
{
    if(rc>0)
    {
        try
        {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
if(conf==JOptionPane.YES_OPTION)
{
    rs.deleteRow();
    rc--;
    if(rc==0)
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
    else if(rp>rc)
    {
        rp=rc;
        showrecord(rp);
    }
    else
        showrecord(rp);
    JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&
cmbq3.getSelectedIndex()>=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from loan_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "!" + cmbq3.getSelectedItem() + "!";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from loan_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rct;i++)
    {
        rst.absolute(i+1);
        rst.moveToCurrentRow();
        for(j=0;j<cct;j++)
            rdt[i+1][j]=rst.getObject(j+1);
    }
    if(ts!=null) ps.remove(ts);
    ts=new JTable(rdt,cnm);
    ts.setBounds(10,60,500,360);
    ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
    try
    {
        rs.moveToCurrentRow();

        rs.updateInt("Sl_no",Integer.parseInt(txt1.getText()));
        rs.updateString("Type",txt2.getText());
        rs.updateString("Purpose",txt3.getText());
        rs.updateString("Eligibility",txt4.getText());
        rs.updateInt("Amounnt",Integer.parseInt(txt5.getText()));
        rs.updateString("Margine",txt6.getText());
        rs.updateInt("Fee",Integer.parseInt(txt7.getText()));
        rs.updateString("Repayment",txt8.getText());
        rs.updateString("Interest_rate",txt9.getText());
        rs.updateString("Security",txt10.getText());

        rs.updateRow();
        JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pe.setVisible(false);
pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
if(e.getSource()==btn1)
{
    if(rc>0)
    {
        rp=1;
        showrecord(rp);
    }
}
if(e.getSource()==btn2)
{
    if(rc>0 && rp>1)
    {
        rp--;
        showrecord(rp);
    }
}
if(e.getSource()==btn3)
{
    if(rc>0 && rp<rc)
    {
        rp++;
        showrecord(rp);
    }
}
if(e.getSource()==btn4)

{
    if(rc>0)
    {
        rp=rc;
        showrecord(rp);
    }
}
if(e.getSource()==btn5)
{
    refreshrecord();
}
if(e.getSource()==btn6)
{
    clearrecord();
    pm.setVisible(false);
    pa.setVisible(true);
}
if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(e.getSource() == btn8)
{
    deleterecord();
}
if(e.getSource() == btn9)
{
    tab.setSelectedIndex(1);
}

if(e.getSource() == btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource() == btn11)
{
    setVisible(false);
}
if(e.getSource() == btn12)
{
    saverecord();
}
if(e.getSource() == btn13)
{
    clearrecord();
}
if(e.getSource() == btn14)
{
    if(rp > 0 && rc > 0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource() == btn15)
{
    updaterecord();
}
if(e.getSource() == btn16)
{
    restorerecord();
}
if(e.getSource() == btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource() == btn18)
{
    searchrecord();
}
if(e.getSource() == btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource() == btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(e.getSource()==cmbq1)  
    {  
        if(cmbq1.getSelectedIndex() >=0)  
        {  
            try  
            {  
                stt=cn.createStatement();  
                sql="select distinct " + cmbq1.getSelectedItem() + " from loan_detail";  
                rst=stt.executeQuery(sql);  
                cmbq3.removeAllItems();  
                while(rst.next())  
                    cmbq3.addItem(rst.getObject(1));  
                rst.close();  
                stt.close();  
            }  
            catch(Exception ex)  
            {  
                JOptionPane.showMessageDialog(this,ex,"query exception"  
,JOptionPane.ERROR_MESSAGE);  
            }  
        }  
    }  
}  
public static void main(String args[])  
{  
    ld1 f;  
    f=new ld1();  
    f.show();  
}  
}
```

\*\*\*\*\*END OF LOAN DETAIL FORM CODING\*\*\*\*\*

### AGREEMENT DETAIL FORM CODING

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.*;  
import java.sql.*;  
class agd extends JFrame implements ActionListener,ItemListener  
{  
    JLabel title, lblq1, lblq2, lblq3;  
    JLabel lbl1, lbl2, lbl3, lblrs;  
    JTextField txt1,txt3;  
    JComboBox cmbq1,cmbq2,cmbq3,cmb;  
    JButton  
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt  
n17,btn18,btn19,btn20;  
    JTabbedPane tab;  
    JPanel pf,pm,pa,pe,pq,ps;  
    Container c;  
  
    Connection cn;  
    Statement st,stt;  
    ResultSet rs,rst;  
    ResultSetMetaData rm;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
int rp,rc,i,j,cct,rct;
String sql;
JTable ts;
Object cnm[],rdt[][][];
agd()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGREEMENT DETAIL");
    setBounds(10,10,780,560);
    setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
    c= getContentPane();
    c.setLayout(null);
    c.setBackground(Color.black);
    title=new JLabel("AGREEMENT DETAIL INFORMATION",JLabel.CENTER);
    title.setFont(new Font("Arial",Font.BOLD,24));
    title.setForeground(Color.green);
    title.setBounds(0,0,780,30);
    c.add(title);

    tab=new JTabbedPane();
    tab.setBounds(5,30,760,495);
    c.add(tab);

    pf=new JPanel();
    pf.setLayout(null);
    tab.addTab("AGREEMENT DETAIL FORM",pf);

    lbl1=new JLabel("Agg_no");
    lbl2=new JLabel("Ac_Id");
    lbl1.setBounds(20,10,180,25);
    lbl2.setBounds(20,40,180,25);
    pf.add(lbl1);
    pf.add(lbl2);

    txt1=new JTextField();
    cmb=new JComboBox();

    txt1.setBounds(180,10,180,25);

    cmb.addItemListener(this);
    cmb.setBounds(180,40,180,25);

    pf.add(cmb);
    pf.add(txt1);

    pm=new JPanel();
    pm.setBounds(40,160,560,80);
    pm.setLayout(new GridLayout(2,6));
    pf.add(pm);

    lblrs= new JLabel("0/0",JLabel.CENTER);
    btn1 = new JButton("first");
    btn2 = new JButton("prev");
    btn3 = new JButton("next");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,160,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn20.setBounds(520,30,80,30);

btn20.addActionListener(this);

ps.add(btn20);

openrecord();
fillcombo();
fillqattribs();
fillqop();
}

void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement	ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from agreement_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
rp=1;
showrecord(rp);
}
else
{
rp=0;
clearrecord();
showrecstatus();
}
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillcombo()
{
try
{
stt=cn.createStatement();
sql="select Ac_Id from account_detail";
rst=stt.executeQuery(sql);
while(rst.next())
cmb.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}

boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from agreement_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}

void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        txt1.setText(String.valueOf(rs.getInt("Agg_no")));
        cmb.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
        showrecstatus();
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
void clearrecord()
{
    txt1.setText("");
}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
    try
    {
        rs.moveToInsertRow();
        rs.updateInt("Agg_no", Integer.parseInt(txt1.getText()));
        rs.updateInt("Ac_Id", Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.insertRow();
        rp=++rc;
        showrecstatus();
        JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void refreshrecord()
{
    try
    {
        sql="select * from agreement_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void deleterecord()
{
    if(rc>0)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    try  
    {  
        int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this  
record?","delete confirmation",JOptionPane.YES_NO_OPTION);  
        if(conf==JOptionPane.YES_OPTION)  
        {  
            rs.deleteRow();  
            rc--;  
            if(rc==0)  
            {  
                rp=0;  
                clearrecord();  
                showrecstatus();  
            }  
            else if(rp>rc)  
            {  
                rp=rc;  
                showrecord(rp);  
            }  
            else  
                showrecord(rp);  
            JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
        }  
    }  
    catch(Exception e)  
    {  
        JOptionPane.showMessageDialog(this,e,"deleterecord exception"  
,JOptionPane.ERROR_MESSAGE);  
    }  
}  
}  
void searchrecord()  
{  
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&  
cmbq3.getSelectedIndex()>=0)  
    {  
        try  
        {  
            stt=cn.createStatement();  
            sql="select * from agreement_detail where " + cmbq1.getSelectedItem() +  
cmbq2.getSelectedItem() + "!" + cmbq3.getSelectedItem() + "!";  
            rst=stt.executeQuery(sql);  
            if(rst.next())  
                JOptionPane.showMessageDialog(this,"record found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
            else  
                JOptionPane.showMessageDialog(this,"record not found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
            rst.close();  
            stt.close();  
        }  
        catch(Exception ex)  
        {  
            JOptionPane.showMessageDialog(this,ex,"search exception"  
,JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from agreement_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)

    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rct;i++)
    {
        rst.absolute(i+1);
        rst.moveToCurrentRow();
        for(j=0;j<cct;j++)
            rdt[i+1][j]=rst.getObject(j+1);
    }
    if(ts!=null) ps.remove(ts);
    ts=new JTable(rdt,cnm);
    ts.setBounds(10,60,500,360);
    ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}

void restorerecord()
{
    showrecord(rp);
}

void updaterecord()
{
    try
    {
        rs.moveToCurrentRow();
        rs.updateInt("Agg_no",Integer.parseInt(txt1.getText()));
        rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));

        rs.updateRow();
        JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
        pe.setVisible(false);
        pm.setVisible(true);
    }
catch(Exception ex)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
if(e.getSource()==btn1)
{
if(rc>0)
{
rp=1;
showrecord(rp);
}
}
if(e.getSource()==btn2)
{
if(rc>0 && rp>1)
{
rp--;
showrecord(rp);
}
}
if(e.getSource()==btn3)
{
if(rc>0 && rp<rc)
{
rp++;
showrecord(rp);
}
}
if(e.getSource()==btn4)
{
if(rc>0)
{
rp=rc;
showrecord(rp);
}
}
if(e.getSource()==btn5)
{
refreshrecord();
}
if(e.getSource()==btn6)
{
clearrecord();
pm.setVisible(false);
pa.setVisible(true);
}
if(e.getSource()==btn7)
{
pm.setVisible(false);
pe.setVisible(true);
}
if(e.getSource()==btn8)
{
deleterecord();
}
if(e.getSource()==btn9)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
stt=cn.createStatement();
sql="select distinct " + cmbq1.getSelectedItem() + " from agreement_detail";
rst=stt.executeQuery(sql);
cmbq3.removeAllItems();
while(rst.next())
    cmbq3.addItem(rst.getObject(1));
rst.close();
stt.close();
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
}
}
}
public static void main(String args[])
{
    agd f;
    f=new agd();
    f.show();
}
}
```

\*\*\*\*\*END OF AGREEMENT DETAIL FORM CODING\*\*\*\*\*

### AGG\_PROP DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class apd extends JFrame implements ActionListener,ItemListener
{
    JLabel title, lblq1, lblq2, lblq3;
    JLabel lbl1, lbl2, lbl3, lbl4, lbl5, lblrs, lbl6;
    JTextField txt2, txt3, txt4, txt5, txt6;
    JComboBox cmbq1, cmbq2, cmbq3, cmb;
    JButton
btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btn10, btn11, btn12, btn13, btn14, btn15, btn16, bt
n17, btn18, btn19, btn20;
    JTabbedPane tab;
    JPanel pf, pm, pa, pe, pq, ps;
    Container c;

    Connection cn;
    Statement st, stt;
    ResultSet rs, rst;
    ResultSetMetaData rm;
    int rp, rc, i, j, cct, rct;
    String sql;
    JTable ts;
    Object cnm[], rdt[][][];
    apd()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG_PRO DETAIL");
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
setBounds(10,10,780,560);
setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
c= getContentPane();
c.setLayout(null);
c.setBackground(Color.black);
title=new JLabel("AGG_PRO DETAIL INFORMATION",JLabel.CENTER);
title.setFont(new Font("Arial",Font.BOLD,24));
title.setForeground(Color.green);
title.setBounds(0,0,780,30);
c.add(title);

tab=new JTabbedPane();
tab.setBounds(5,30,760,495);
c.add(tab);

pf=new JPanel();
pf.setLayout(null);
pf.setBackground(Color.red);
tab.addTab("AGG_PRO DETAIL FORM",pf);

lbl1=new JLabel("Ac_Id");
lbl2=new JLabel("Prop_name");
lbl3=new JLabel("F_name");
lbl4=new JLabel("Organization");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);

cmb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();

cmb.setBounds(180,10,180,25);
txt2.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);

cmb.addItemListener(this);

pf.add(cmb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pm=new JPanel();
pm.setBounds(40,160,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,160,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pq.add(btn18);
    pq.add(btn19);

    ps=new JPanel();
    ps.setLayout(null);
    tab.addTab("show",ps);

    btn20 = new JButton("return");
    btn20.setBounds(520,30,80,30);
    btn20.addActionListener(this);
    ps.add(btn20);

    openrecord();
    fillcombo();
    fillqattribs();
    fillqop();
}
void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");

        st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from agg_prop_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select Ac_Id from account_detail";
    rst=stt.executeQuery(sql);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
while(rst.next())
cmb.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}

boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from agg_prop_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}
void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmb.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
txt2.setText(rs.getString("Prop_name"));
txt3.setText(rs.getString("F_name"));
txt4.setText(rs.getString("Organization"));

showrecstatus();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}

void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");

}
void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();

        rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.updateString("Prop_name",txt2.getText());
        rs.updateString("F_name",txt3.getText());
        rs.updateString("Organization",txt4.getText());

    rs.insertRow();
    rp=++rc;
    showrecstatus();
    JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void refreshrecord()
{
try
{
    sql="select * from agg_prop_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    rp=1;  
    showrecord(rp);  
}  
else  
{  
    rp=0;  
    clearrecord();  
    showrecstatus();  
}  
}  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void deleterecord()  
{  
    if(rc>0)  
    {  
        try  
        {  
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this  
record?","delete confirmation",JOptionPane.YES_NO_OPTION);  
            if(conf==JOptionPane.YES_OPTION)  
            {  
                rs.deleteRow();  
                rc--;  
                if(rc==0)  
                {  
                    rp=0;  
                    clearrecord();  
                    showrecstatus();  
                }  
                else if(rp>rc)  
                {  
                    rp=rc;  
                    showrecord(rp);  
                }  
                else  
                    showrecord(rp);  
                JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
            }  
        }  
        catch(Exception e)  
        {  
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"  
,JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}  
void searchrecord()  
{  
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&  
cmbq3.getSelectedIndex()>=0)  
    {  
        try
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    stt=cn.createStatement();  
    sql="select * from agg_prop_detail where " + cmbq1.getSelectedItem() +  
cmbq2.getSelectedItem() + "" + cmbq3.getSelectedItem() + "";  
    rst=stt.executeQuery(sql);  
    if(rst.next())  
        JOptionPane.showMessageDialog(this,"record found","search result"  
, JOptionPane.INFORMATION_MESSAGE);  
    else  
        JOptionPane.showMessageDialog(this,"record not found","search result"  
, JOptionPane.INFORMATION_MESSAGE);  
    rst.close();  
    stt.close();  
}  
catch(Exception ex)  
{  
    JOptionPane.showMessageDialog(this,ex,"search exception"  
, JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void showgrecord()  
{  
try  
{  
  
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);  
sql="select * from agg_prop_detail";  
rst=stt.executeQuery(sql);  
rct=0;  
while(rst.next()) rct++;  
rm=rst.getMetaData();  
cct=rm.getColumnCount();  
rdt=new Object[rct+1][cct];  
cnm=new Object[cct];  
for(i=0;i<cct;i++)  
{  
    cnm[i]=rm.getColumnName(i+1);  
    rdt[0][i]=cnm[i];  
}  
for(i=0;i<rct;i++)  
{  
    rst.absolute(i+1);  
    rst.moveToCurrentRow();  
    for(j=0;j<cct;j++)  
        rdt[i+1][j]=rst.getObject(j+1);  
}  
if(ts!=null) ps.remove(ts);  
ts=new JTable(rdt,cnm);  
ts.setBounds(10,60,500,360);  
ps.add(ts);  
}  
catch(Exception ex)  
{  
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);  
}  
}  
void restorerecord()  
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    showrecord(rp);
}
void updaterecord()
{
    try
    {
        rs.moveToCurrentRow();

        rs.updateInt("Ac_Id", Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.updateString("Prop_name", txt2.getText());
        rs.updateString("F_name", txt3.getText());
        rs.updateString("Organization", txt4.getText());
        rs.updateRow();
        JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
        pe.setVisible(false);
        pm.setVisible(true);
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn3)
    {
        if(rc>0 && rp<rc)
        {
            rp++;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn4)
    {
        if(rc>0)
        {
            rp=rc;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn5)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    refreshrecord();  
}  
if(e.getSource()==btn6)  
{  
    clearrecord();  
    pm.setVisible(false);  
    pa.setVisible(true);  
}  
if(e.getSource()==btn7)  
{  
    pm.setVisible(false);  
    pe.setVisible(true);  
}  
if(e.getSource()==btn8)  
{  
    deleterecord();  
}  
if(e.getSource()==btn9)  
{  
    tab.setSelectedIndex(1);  
}  
if(e.getSource()==btn10)  
{  
    showgrecord();  
    tab.setSelectedIndex(2);  
}  
if(e.getSource()==btn11)  
{  
    setVisible(false);  
}  
if(e.getSource()==btn12)  
{  
    saverecord();  
}  
if(e.getSource()==btn13)  
{  
    clearrecord();  
}  
if(e.getSource()==btn14)  
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn15)  
{  
    updaterecord();  
}  
if(e.getSource()==btn16)  
{  
    restorerecord();  
}  
if(e.getSource()==btn17)  
{  
    pe.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn18)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    searchrecord();  
}  
if(e.getSource()==btn19)  
{  
    tab.setSelectedIndex(0);  
}  
if(e.getSource()==btn20)  
{  
    tab.setSelectedIndex(0);  
}  
}  
public void itemStateChanged(ItemEvent e)  
{  
    if(e.getSource()==cmbq1)  
    {  
        if(cmbq1.getSelectedIndex() >=0)  
        {  
            try  
            {  
                stt=cn.createStatement();  
                sql="select distinct " + cmbq1.getSelectedItem() + " from agg_prop_detail";  
                rst=stt.executeQuery(sql);  
                cmbq3.removeAllItems();  
                while(rst.next())  
                    cmbq3.addItem(rst.getObject(1));  
                rst.close();  
                stt.close();  
            }  
            catch(Exception ex)  
            {  
                JOptionPane.showMessageDialog(this,ex,"query exception"  
,JOptionPane.ERROR_MESSAGE);  
            }  
        }  
    }  
}  
public static void main(String args[])  
{  
    apd f;  
    f=new apd();  
    f.show();  
}  
}
```

\*\*\*\*\*END OF AGG\_PROP\_DETAIL FORM CODING\*\*\*\*\*

### AGG PART DETAIL FORM CODING

```
import javax.swing.*;  
import java.awt.*;  
import java.awt.event.*;  
import java.sql.*;  
class apartd extends JFrame implements ActionListener,ItemListener
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JLabel title, lblq1, lblq2, lblq3;  
    JLabel  
    lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lbl11, lbl12, lbl13, lbl14, lbl15, lblrs;  
    JTextField txt2, txt3, txt4, txt5, txt6, txt7, txt8, txt9, txt10, txt11, txt12, txt13, txt14, txt15;  
    JComboBox cmbq1, cmbq2, cmbq3, cmb, cmbs;  
    JButton  
    btn1, btn2, btn3, btn4, btn5, btn6, btn7, btn8, btn9, btn10, btn11, btn12, btn13, btn14, btn15, btn16, bt  
n17, btn18, btn19, btn20;  
    JTabbedPane tab;  
    JPanel pf, pm, pa, pe, pq, ps;  
    Container c;  
  
    Connection cn;  
    Statement st, stt;  
    ResultSet rs, rst;  
    ResultSetMetaData rm;  
    int rp, rc, i, j, cct, rct;  
    String sql;  
    JTable ts;  
    Object cnm[], rdt[][][];  
    apartd()  
{  
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG_PART DETAIL");  
        setBounds(10,10,780,560);  
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);  
        c= getContentPane();  
        c.setLayout(null);  
        c.setBackground(Color.black);  
        title=new JLabel("AGG_PART DETAIL INFORMATION",JLabel.CENTER);  
        title.setFont(new Font("Arial",Font.BOLD,24));  
        title.setForeground(Color.green);  
        title.setBounds(0,0,780,30);  
        c.add(title);  
  
        tab=new JTabbedPane();  
        tab.setBounds(5,30,760,495);  
        c.add(tab);  
  
        pf=new JPanel();  
        pf.setLayout(null);  
        tab.addTab("A_PART DETAIL FORM",pf);  
  
        lbl1=new JLabel("Loan type");  
        lbl2=new JLabel("Ac_Id");  
        lbl3=new JLabel("Partner1 name");  
        lbl4=new JLabel("Partner2 name");  
        lbl5=new JLabel("Partner3 name");  
        lbl6=new JLabel("Partner4 name");  
        lbl7=new JLabel("F1_name");  
        lbl8=new JLabel("F2_name");  
        lbl9=new JLabel("F3_name");  
        lbl10=new JLabel("F4_name");  
        lbl11=new JLabel("Organization");  
  
        lbl1.setBounds(20,10,120,25);  
        lbl2.setBounds(20,40,120,25);  
        lbl3.setBounds(20,70,120,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(20,160,120,25);
lbl7.setBounds(400,10,120,25);
lbl8.setBounds(400,40,120,25);
lbl9.setBounds(400,70,120,25);
lbl10.setBounds(400,100,120,25);
lbl11.setBounds(400,130,120,25);
pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);

pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
```

```
cmb=new JComboBox();
cmbb=new JComboBox();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
```

```
cmb.setBounds(180,10,180,25);
cmbb.setBounds(180,40,180,25);
txt3.setBounds(180,70,180,25);
txt4.setBounds(180,100,180,25);
txt5.setBounds(180,130,180,25);
txt6.setBounds(180,160,180,25);
txt7.setBounds(540,10,180,25);
txt8.setBounds(540,40,180,25);
txt9.setBounds(540,70,180,25);
txt10.setBounds(540,100,180,25);
txt11.setBounds(540,130,180,25);
```

```
cmb.addItemListener(this);
cmbb.addItemListener(this);

pf.add(cmb);
pf.add(cmbb);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);

btn20.addActionListener(this);

ps.add(btn20);

openrecord();

fillcombo();
fillcombo1();
fillqattribs();
fillqop();
}

void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from agg_part_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select type from loan_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo1()
{
try
{
    stt=cn.createStatement();
    sql="select ac_id from account_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmbb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo1 exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmbq2.addItem("<=");
cmbq2.addItem(">=");
cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from agg_part_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
        r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}
void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        cmb.setSelectedItem(rs.getString("type"));
        cmbb.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
        txt2.setText(rs.getString("Partner1_name"));
        txt3.setText(rs.getString("Partner2_name"));
        txt4.setText(rs.getString("Partner3_name"));
        txt5.setText(rs.getString("Partner4_name"));
        txt6.setText(rs.getString("F1_name"));
        txt7.setText(rs.getString("F2_name"));
        txt8.setText(rs.getString("F3_name"));
        txt9.setText(rs.getString("F4_name"));
        txt10.setText(rs.getString("Organization"));

        showrecstatus();
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt8.setText("");
txt9.setText("");
txt10.setText("");

}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}

void saverecord()
{
    try
    {
        rs.moveToInsertRow();
        rs.updateString("type",cmb.getSelectedItem().toString());
        rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.updateString("Partner1_name",txt2.getText());
        rs.updateString("Partner2_name",txt3.getText());
        rs.updateString("Partner3_name",txt4.getText());
        rs.updateString("Partner4_name",txt5.getText());
        rs.updateString("F1_name",txt6.getText());
        rs.updateString("F2_name",txt7.getText());
        rs.updateString("F3_name",txt8.getText());
        rs.updateString("F4_name",txt9.getText());
        rs.updateString("Organization",txt10.getText());
        rs.insertRow();
        rp++;
        showrecstatus();
        JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void refreshrecord()
{
    try
    {
        sql="select * from agg_part_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
if(rc>0)
{
try
{
int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
if(conf==JOptionPane.YES_OPTION)
{
rs.deleteRow();
rc--;
if(rc==0)
{
rp=0;
clearrecord();
showrecstatus();
}
else if(rp>rc)
{
rp=rc;
showrecord(rp);
}
else
showrecord(rp);
JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
}
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
}
void searchrecord()
{
if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&
cmbq3.getSelectedIndex()>=0)
{
try
{
stt=cn.createStatement();
sql="select * from agg_part_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "!" + cmbq3.getSelectedItem() + "!";
rst=stt.executeQuery(sql);
if(rst.next())
JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
else
JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
rst.close();
stt.close();
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void showgrecord()
{
try
{
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
sql="select * from agg_part_detail";
rst=stt.executeQuery(sql);
rct=0;
while(rst.next()) rct++;
rm=rst.getMetaData();
cct=rm.getColumnCount();
rdt=new Object[rct+1][cct];
cnm=new Object[cct];
for(i=0;i<cct;i++)
{
    cnm[i]=rm.getColumnName(i+1);
    rdt[0][i]=cnm[i];
}
for(i=0;i<rct;i++)
{
    rst.absolute(i+1);
    rst.moveToCurrentRow();
    for(j=0;j<cct;j++)
        rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateString("type",cmb.getSelectedItem().toString());
    rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("Partner1_name",txt2.getText());
    rs.updateString("Partner2_name",txt3.getText());
    rs.updateString("Partner3_name",txt4.getText());
    rs.updateString("Partner4_name",txt5.getText());
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.updateString("F1_name",txt6.getText());
rs.updateString("F2_name",txt7.getText());
rs.updateString("F3_name",txt8.getText());
rs.updateString("F4_name",txt9.getText());
rs.updateString("Organization",txt10.getText());
rs.updateRow();

JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
pe.setVisible(false);
pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}

public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn3)
    {
        if(rc>0 && rp<rc)
        {
            rp++;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn4)
    {
        if(rc>0)
        {
            rp=rc;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn5)
    {
        refreshrecord();
    }
    if(e.getSource()==btn6)
    {
        clearrecord();
        pm.setVisible(false);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pa.setVisible(true);
}
if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}
if(e.getSource()==btn8)
{
    deleterecord();
}
if(e.getSource()==btn9)
{
    tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from agg_part_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
public static void main(String args[])
{
    apartd f;
    f=new apartd();
    f.show();
}
```

\*\*\*\*\*END OF AGG PART DETAIL FORM CODING\*\*\*\*\*

## AGG TYPE JF DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class atjd extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel lbl1,lbl2,lbl3,lbl4,lbl5,lblrs;
    JTextField txt2,txt3,txt4,txt5,txt6;
    JComboBox cmbq1,cmbq2,cmbq3,cmb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JPanel pf,pm,pa,pe,pq,ps;
Container c;

Connection cn;
Statement st,stt;
ResultSet rs,rst;
ResultSetMetaData rm;
int rp,rc,i,j,cct,rct;
String sql;
JTable ts;
Object cnm[],rdt[][][];
atjd()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG_TYPE_JF DETAIL");
    setBounds(10,10,780,560);
    setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
    c=ContentPane();
    c.setLayout(null);
    c.setBackground(Color.black);
    title=new JLabel("AGG_TYPE_JF DETAIL INFORMATION",JLabel.CENTER);
    title.setFont(new Font("Arial",Font.BOLD,24));
    title.setForeground(Color.green);
    title.setBounds(0,0,780,30);
    c.add(title);

    tab=new JTabbedPane();
    tab.setBounds(5,30,760,495);
    c.add(tab);

    pf=new JPanel();
    pf.setLayout(null);
    tab.addTab("AT_JF DETAIL FORM",pf);

    lbl1=new JLabel("Ac_Id");
    lbl2=new JLabel("Family head");
    lbl3=new JLabel("F_name");
    lbl4=new JLabel("Organization");

    lbl1.setBounds(20,10,120,25);
    lbl2.setBounds(20,40,120,25);
    lbl3.setBounds(20,70,120,25);
    lbl4.setBounds(20,100,120,25);

    pf.add(lbl1);
    pf.add(lbl2);
    pf.add(lbl3);
    pf.add(lbl4);

    cmb=new JComboBox();
    txt2=new JTextField();
    txt3=new JTextField();
    txt4=new JTextField();

    cmb.setBounds(180,10,180,25);
    txt2.setBounds(180,40,180,25);
    txt3.setBounds(180,70,180,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt4.setBounds(180,100,180,25);

cmb.addItemListener(this);

pf.add(cmb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);

lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pq.add(cmbq3);

    cmbq1.addItemListener(this);

    btn18 = new JButton("search");
    btn19 = new JButton("return");

    btn18.setBounds(420,30,80,30);
    btn19.setBounds(520,30,80,30);

    btn18.addActionListener(this);
    btn19.addActionListener(this);

    pq.add(btn18);
    pq.add(btn19);

    ps=new JPanel();
    ps.setLayout(null);
    tab.addTab("show",ps);

    btn20 = new JButton("return");

    btn20.setBounds(520,30,80,30);

    btn20.addActionListener(this);

    ps.add(btn20);

    openrecord();
    fillcombo();
    fillqattribs();
    fillqop();
}

void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");

        st=cn.createStatement	ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from agg_type_jf_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select Ac_Id from account_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from agg_type_jf_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
    catch(Exception e)
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
}
return r;
}
void showrecord(int rp)
{
try
{
rs.absolute(rp);
rs.moveToCurrentRow();
cmb.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
txt2.setText(rs.getString("Family_head"));
txt3.setText((rs.getString("F_name")));
txt4.setText(rs.getString("Organization"));

showrecstatus();
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}
void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");

}
void showrecstatus()
{
lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
rs.moveToInsertRow();

rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));
rs.updateString("Family_head",txt2.getText());
rs.updateString("F_name",txt3.getText());
rs.updateString("Organization",txt4.getText());

rs.insertRow();
rp=++rc;
showrecstatus();
JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

void refreshrecord()
{
try
{
    sql="select * from agg_type_jf_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())
    {
        rp=1;
        showrecord(rp);
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}

void deleterecord()
{
if(rc>0)
{
try
{
    int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
    if(conf==JOptionPane.YES_OPTION)
    {
        rs.deleteRow();
        rc--;
        if(rc==0)
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
        else if(rp>rc)
        {
            rp=rc;
            showrecord(rp);
        }
    }
    else
        showrecord(rp);
}
}
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void searchrecord()
{
    if(cmbq1.getSelectedIndex ()>=0 && cmbq2.getSelectedIndex ()>=0 &&
cmbq3.getSelectedIndex ()>=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from agg_type_jf_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "'" + cmbq3.getSelectedItem() + "'";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else
                JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            rst.close();
            stt.close();
        }
        catch(Exception ex)
        {
            JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from agg_type_jf_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rct;i++)
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rst.absolute(i+1);
rst.moveToCurrentRow();
for(j=0;j<cct;j++)
    rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("Ac_Id",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateString("Family_head",txt2.getText());
    rs.updateString("F_name",txt5.getText());
    rs.updateString("Organization",txt4.getText());
    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn3)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(rc>0 && rp<rc)  
    {  
        rp++;  
        showrecord(rp);  
    }  
}  
if(e.getSource()==btn4)  
{  
    if(rc>0)  
    {  
        rp=rc;  
        showrecord(rp);  
    }  
}  
if(e.getSource()==btn5)  
{  
    refreshrecord();  
}  
if(e.getSource()==btn6)  
{  
    clearrecord();  
    pm.setVisible(false);  
    pa.setVisible(true);  
}  
if(e.getSource()==btn7)  
{  
    pm.setVisible(false);  
    pe.setVisible(true);  
}  
if(e.getSource()==btn8)  
{  
    deleterecord();  
}  
if(e.getSource()==btn9)  
{  
    tab.setSelectedIndex(1);  
}  
if(e.getSource()==btn10)  
{  
    showgrecord();  
    tab.setSelectedIndex(2);  
}  
if(e.getSource()==btn11)  
{  
    setVisible(false);  
}  
if(e.getSource()==btn12)  
{  
    saverecord();  
}  
if(e.getSource()==btn13)  
{  
    clearrecord();  
}  
if(e.getSource()==btn14)  
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex()>=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from agg_type_jf_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
public static void main(String args[])
{
    atjd f;
    f=new atjd();
    f.show();
}
```



{

\*\*\*\*\*END OF AGG \_TYPE \_JFDETAIL FORM CODING\*\*\*\*\*

AGG TYPE RULE DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class atrd extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel
    lbl1,lbl2,lbl3,lbl4,lbl5,lbl6,lbl7,lbl8,lbl9,lbl10,lbl11,lbl12,lbl13,lbl14,lbl15,lblr;
    JTextField txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;
    JComboBox cmbq1,cmbq2,cmbq3,cmb,cmbb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    atrd()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : AGG_TYPE_RULE
DETAIL");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        c=getContentPane();
        c.setLayout(null);
        c.setBackground(Color.black);
        title=new JLabel("AGG_TYPE_RULE DETAIL INFORMATION",JLabel.CENTER);
        title.setFont(new Font("Arial",Font.BOLD,24));
        title.setForeground(Color.green);
        title.setBounds(0,0,780,30);
        c.add(title);

        tab=new JTabbedPane();
        tab.setBounds(5,30,760,495);
        c.add(tab);

        pf=new JPanel();
        pf.setLayout(null);
        tab.addTab("ATR DETAIL FORM",pf);

        lbl1=new JLabel("Loan type");

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl2=new JLabel("Agg_no");
lbl3=new JLabel("Loan_Amt");
lbl4=new JLabel("Interest_Rate");
lbl5=new JLabel("Agg_date");
lbl6=new JLabel("Installment_no");
lbl7=new JLabel("Repayment_Time");
lbl8=new JLabel("Witness_name");
lbl9=new JLabel("App_sign");
lbl10=new JLabel("Officer_name");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(400,10,120,25);
lbl7.setBounds(400,40,120,25);
lbl8.setBounds(400,70,120,25);
lbl9.setBounds(400,100,120,25);
lbl10.setBounds(400,130,120,25);
pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
```

```
cmb=new JComboBox();
cmbb=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
```

```
cmb.setBounds(180,10,180,25);
cmbb.setBounds(180,40,180,25);
txt2.setBounds(180,70,180,25);
txt3.setBounds(180,100,180,25);
txt4.setBounds(180,130,180,25);
txt5.setBounds(540,10,180,25);
txt6.setBounds(540,40,180,25);
txt7.setBounds(540,70,180,25);
txt8.setBounds(540,100,180,25);
txt9.setBounds(540,130,180,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmb.addItemListener(this);
cmbb.addItemListener(this);

pf.add(cmb);
pf.add(cmbb);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);

pm=new JPanel();
pm.setBounds(40,260,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,260,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,260,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);

btn20.addActionListener(this);

ps.add(btn20);

openrecord();

fillcombo();
fillcombo1();
fillqattribs();
fillqop();
}

void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from agg_type_rule_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
}
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select type from loan_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombol()
{
try
{
    stt=cn.createStatement();
    sql="select Agg_no from agreement_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmbb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombol exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbql.addItem(rm.getColumnName(i+1));
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception e)
{

    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}

}

void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");

}

boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select *from agg_type_rule_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
        r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}

void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        cmb.setSelectedItem(rs.getString("Type"));
        cmbb.setSelectedItem(String.valueOf(rs.getInt("Agg_no")));

        txt2.setText(String.valueOf(rs.getInt("Loan_Amt")));
        txt3.setText(String.valueOf(rs.getString("Interest_Rate")));
        txt4.setText(String.valueOf(utility.odate(rs.getDate("Agg_date"))));
        txt5.setText(String.valueOf(rs.getInt("Installment_no")));
        txt6.setText(String.valueOf(rs.getInt("Repayment_Time")));
        txt7.setText(rs.getString("Witness_name"));
        txt8.setText(rs.getString("App_sign"));
        txt9.setText(rs.getString("Officer"));

        showrecstatus();
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

}

void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
txt9.setText("");

}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}

void saverecord()
{
    try
    {
        rs.moveToInsertRow();
        rs.updateString("Type",cmb.getSelectedItem().toString());
        rs.updateInt("Agg_no",Integer.parseInt(cmb.getSelectedItem().toString()));
        rs.updateInt("Loan_Amt",Integer.parseInt(txt2.getText()));
        rs.updateInt("Interest_Rate",Integer.parseInt(txt3.getText()));
        rs.updateDate("Agg_date",utility.jdate(txt4.getText()));
        rs.updateInt("Installment_no",Integer.parseInt(txt5.getText()));
        rs.updateInt("Repayment_time",Integer.parseInt(txt6.getText()));
        rs.updateString("Witness_name",txt7.getText());
        rs.updateString("App_sign",txt8.getText());
        rs.updateString("Officer",txt9.getText());

        rs.insertRow();
        rp=++rc;
        showrecstatus();
        JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

void refreshrecord()
{
    try
    {
        sql="select * from agg_type_rule_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    rp=1;  
    showrecord(rp);  
}  
else  
{  
    rp=0;  
    clearrecord();  
    showrecstatus();  
}  
}  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void deleterecord()  
{  
    if(rc>0)  
    {  
        try  
        {  
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this  
record?","delete confirmation",JOptionPane.YES_NO_OPTION);  
            if(conf==JOptionPane.YES_OPTION)  
            {  
                rs.deleteRow();  
                rc--;  
                if(rc==0)  
                {  
                    rp=0;  
                    clearrecord();  
                    showrecstatus();  
                }  
                else if(rp>rc)  
                {  
                    rp=rc;  
                    showrecord(rp);  
                }  
                else  
                    showrecord(rp);  
                JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
            }  
        }  
        catch(Exception e)  
        {  
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"  
,JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}  
void searchrecord()  
{  
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&  
cmbq3.getSelectedIndex()>=0)  
    {  
        try
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    stt=cn.createStatement();  
    sql="select * from agg_type_rule_detail where " + cmbq1.getSelectedItem() +  
cmbq2.getSelectedItem() + "" + cmbq3.getSelectedItem() + "";  
    rst=stt.executeQuery(sql);  
    if(rst.next())  
        JOptionPane.showMessageDialog(this,"record found","search result"  
, JOptionPane.INFORMATION_MESSAGE);  
    else  
        JOptionPane.showMessageDialog(this,"record not found","search result"  
, JOptionPane.INFORMATION_MESSAGE);  
    rst.close();  
    stt.close();  
}  
catch(Exception ex)  
{  
    JOptionPane.showMessageDialog(this,ex,"search exception"  
, JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void showgrecord()  
{  
try  
{  
  
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);  
sql="select * from agg_type_rule_detail";  
rst=stt.executeQuery(sql);  
rct=0;  
while(rst.next()) rct++;  
rm=rst.getMetaData();  
cct=rm.getColumnCount();  
rdt=new Object[rct+1][cct];  
cnm=new Object[cct];  
for(i=0;i<cct;i++)  
{  
    cnm[i]=rm.getColumnName(i+1);  
    rdt[0][i]=cnm[i];  
}  
for(i=0;i<rct;i++)  
{  
    rst.absolute(i+1);  
    rst.moveToCurrentRow();  
    for(j=0;j<cct;j++)  
        rdt[i+1][j]=rst.getObject(j+1);  
}  
if(ts!=null) ps.remove(ts);  
ts=new JTable(rdt,cnm);  
ts.setBounds(10,60,500,360);  
ps.add(ts);  
}  
catch(Exception ex)  
{  
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);  
}  
}  
void restorerecord()  
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateString("Type",cmb.getSelectedItem().toString());
    rs.updateInt("Agg_no",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateInt("Loan_Amt",Integer.parseInt(txt2.getText()));
    rs.updateInt("Interest_Rate",Integer.parseInt(txt3.getText()));
    rs.updateDate("Agg_date",utility.jdate(txt4.getText()));
    rs.updateInt("Installment_no",Integer.parseInt(txt5.getText()));
    rs.updateInt("Repayment_time",Integer.parseInt(txt6.getText()));
    rs.updateString("Witness_name",txt7.getText());
    rs.updateString("App_sign",txt8.getText());
    rs.updateString("Officer",txt9.getText());

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn3)
    {
        if(rc>0 && rp<rc)
        {
            rp++;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn4)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(rc>0)  
    {  
        rp=rc;  
        showrecord(rp);  
    }  
}  
if(e.getSource()==btn5)  
{  
    refreshrecord();  
}  
if(e.getSource()==btn6)  
{  
    clearrecord();  
    pm.setVisible(false);  
    pa.setVisible(true);  
}  
if(e.getSource()==btn7)  
{  
    pm.setVisible(false);  
    pe.setVisible(true);  
}  
if(e.getSource()==btn8)  
{  
    deleterecord();  
}  
if(e.getSource()==btn9)  
{  
    tab.setSelectedIndex(1);  
}  
if(e.getSource()==btn10)  
{  
    showgrecord();  
    tab.setSelectedIndex(2);  
}  
if(e.getSource()==btn11)  
{  
    setVisible(false);  
}  
if(e.getSource()==btn12)  
{  
    saverecord();  
}  
if(e.getSource()==btn13)  
{  
    clearrecord();  
}  
if(e.getSource()==btn14)  
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn15)  
{  
    updaterecord();  
}  
if(e.getSource()==btn16)  
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from
agg_type_rule_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
public static void main(String args[])
{
    atrd f;
    f=new atrd();
    f.show();
}
```

\*\*\*\*\***END OF AGG TYPE RULE DETAIL FORM  
CODING\*\*\*\*\***

**FORM DETAIL FORM CODING**



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class frmd extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel lbl1,lbl2,lbl3,lblrs;
    JTextField txt1,txt3;
    JComboBox cmbq1,cmbq2,cmbq3,cmb,cmbb;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
frmd()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : FORM DETAIL");
    setBounds(10,10,780,560);
    setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
    c=ContentPane();
    c.setLayout(null);
    c.setBackground(Color.black);
    title=new JLabel("FORM DETAIL INFORMATION",JLabel.CENTER);
    title.setFont(new Font("Arial",Font.BOLD,24));
    title.setForeground(Color.green);
    title.setBounds(0,0,780,30);
    c.add(title);

    tab=new JTabbedPane();
    tab.setBounds(5,30,760,495);
    c.add(tab);

    pf=new JPanel();
    pf.setLayout(null);
    tab.addTab("FORM DETAIL FORM",pf);

    lbl1=new JLabel("Form_Id");
    lbl2=new JLabel("App_code");
    lbl3=new JLabel("Ac_Id");

    lbl1.setBounds(20,10,180,25);
    lbl2.setBounds(20,40,180,25);
    lbl3.setBounds(20,70,180,25);

    pf.add(lbl1);
    pf.add(lbl2);
    pf.add(lbl3);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt1=new JTextField();
cmb=new JComboBox();
cmbb=new JComboBox();

txt1.setBounds(180,10,180,25);

cmb.addItemListener(this);
cmb.setBounds(180,40,180,25);
cmbb.addItemListener(this);
cmbb.setBounds(180,70,180,25);

pf.add(txt1);
pf.add(cmb);
pf.add(cmbb);
pm=new JPanel();
pm.setBounds(40,160,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,160,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,160,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);

btn20 = new JButton("return");

btn20.setBounds(520,30,80,30);

btn20.addActionListener(this);

ps.add(btn20);

openrecord();
fillcombo();
fillcombo1();
fillqattribs();
fillqop();
}
void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from form_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
rp=1;
showrecord(rp);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select App_code from applicant_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillcombo1()
{
try
{
    stt=cn.createStatement();
    sql="select Ac_Id from account_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmbb.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbql.addItem(rm.getColumnName(i+1));
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}

void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");

}

boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from form_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
        r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}

void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        txt1.setText(String.valueOf(rs.getInt("Form_id")));
        cmb.setSelectedItem(String.valueOf(rs.getInt("App_code")));
        cmbb.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
        showrecstatus();
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

void clearrecord()
{

    txt1.setText("");
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();
    rs.updateInt("Form_Id", Integer.parseInt(txt1.getText()));
    rs.updateInt("App_code", Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateInt("Ac_Id", Integer.parseInt(cmbb.getSelectedItem().toString()));
    rs.insertRow();
    rp=++rc;
    showrecstatus();
    JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void refreshrecord()
{
try
{
    sql="select * from form_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())
    {
        rp=1;
        showrecord(rp);
    }
    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
if(rc>0)
{
try
{
    int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
    if(conf==JOptionPane.YES_OPTION)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    rs.deleteRow();  
    rc--;  
    if(rc==0)  
    {  
        rp=0;  
        clearrecord();  
        showrecstatus();  
    }  
    else if(rp>rc)  
    {  
        rp=rc;  
        showrecord(rp);  
    }  
    else  
        showrecord(rp);  
    JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
}  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"deleterecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void searchrecord()  
{  
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&  
cmbq3.getSelectedIndex()>=0)  
    {  
        try  
{  
            stt=cn.createStatement();  
            sql="select * from form_detail where " + cmbq1.getSelectedItem() +  
cmbq2.getSelectedItem() + " " + cmbq3.getSelectedItem() + " ";  
            rst=stt.executeQuery(sql);  
            if(rst.next())  
                JOptionPane.showMessageDialog(this,"record found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
            else  
                JOptionPane.showMessageDialog(this,"record not found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
            rst.close();  
            stt.close();  
        }  
        catch(Exception ex)  
{  
            JOptionPane.showMessageDialog(this,ex,"search exception"  
,JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}  
void showgrecord()  
{  
    try  
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
sql="select * from form_detail";
rst=stt.executeQuery(sql);
rct=0;
while(rst.next()) rct++;
rm=rst.getMetaData();
cct=rm.getColumnCount();
rdt=new Object[rct+1][cct];
cnm=new Object[cct];
for(i=0;i<cct;i++)
{
    cnm[i]=rm.getColumnName(i+1);
    rdt[0][i]=cnm[i];
}
for(i=0;i<rct;i++)
{
    rst.absolute(i+1);
    rst.moveToCurrentRow();
    for(j=0;j<cct;j++)
        rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateInt("form_id",Integer.parseInt(txt1.getText()));
    rs.updateInt("App_code",Integer.parseInt(cmb.getSelectedItem().toString()));
    rs.updateInt("Ac_Id",Integer.parseInt(cmrb.getSelectedItem().toString()));

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    if(e.getSource()==btn1)  
    {  
        if(rc>0)  
        {  
            rp=1;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn2)  
    {  
        if(rc>0 && rp>1)  
        {  
            rp--;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn3)  
    {  
        if(rc>0 && rp<rc)  
        {  
            rp++;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn4)  
    {  
        if(rc>0)  
        {  
            rp=rc;  
            showrecord(rp);  
        }  
    }  
    if(e.getSource()==btn5)  
    {  
        refreshrecord();  
    }  
    if(e.getSource()==btn6)  
    {  
        clearrecord();  
        pm.setVisible(false);  
        pa.setVisible(true);  
    }  
    if(e.getSource()==btn7)  
    {  
        pm.setVisible(false);  
        pe.setVisible(true);  
    }  
    if(e.getSource()==btn8)  
    {  
        deleterecord();  
    }  
    if(e.getSource()==btn9)  
    {  
        tab.setSelectedIndex(1);  
    }  
    if(e.getSource()==btn10)  
    {  
        showgrecord();  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
}
if(e.getSource()==btn17)
{
    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex()>=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from form_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
        cmbq3.addItem(rst.getObject(1));
        rst.close();
        stt.close();
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
public static void main(String args[])
{
    frmd f;
    f=new frmd();
    f.show();
}
}
```

\*\*\*\*\*END OF FORM DETAIL FORM CODING\*\*\*\*\*

### LOAN TYPE FORM DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class ltfd extends JFrame implements ActionListener,ItemListener
{
    JLabel title, lblq1, lblq2, lblq3;
    JLabel lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lbl11, lbl12, lbl13, lblrs;
    JLabel lbl14, lbl15, lbl16, lbl17, lbl18, lbl19, lbl20, lbl21, lbl22;
    JTextField
    txt1,txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15,txt16,tx
t17,txt18,txt19,txt20,txt21,txt22;

    JComboBox cmbq1,cmbq2,cmbq3,cmb1,cmb2,cmb3;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    ltfd()
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : LOAN_TYPE_FORM  
DETAIL");  
setBounds(10,10,780,560);  
setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);  
c= getContentPane();  
c.setLayout(null);  
c.setBackground(Color.black);  
title=new JLabel("LOAN_TYPE_FORM DETAIL INFORMATION",JLabel.CENTER);  
title.setFont(new Font("Arial",Font.BOLD,24));  
title.setForeground(Color.green);  
title.setBounds(0,0,780,30);  
c.add(title);  
  
tab=new JTabbedPane();  
tab.setBounds(5,30,760,495);  
c.add(tab);  
  
pf=new JPanel();  
pf.setLayout(null);  
tab.addTab("LTF DETAIL FORM",pf);  
  
lbl1=new JLabel("Loan type");  
lbl2=new JLabel("Form_Id");  
lbl3=new JLabel("Ref_no");  
lbl4=new JLabel("To_info");  
lbl5=new JLabel("From_info");  
lbl6=new JLabel("Date_o_fill");  
lbl7=new JLabel("Type");  
lbl8=new JLabel("Date_o_receipt");  
lbl9=new JLabel("Cor_sr_no");  
lbl10=new JLabel("Bank_address");  
lbl11=new JLabel("Bank_branch");  
lbl12=new JLabel("Date_o_recall");  
lbl13=new JLabel("Date_Bill_Transfer");  
lbl14=new JLabel("Sanctioned_Amt");  
lbl15=new JLabel("Date_o_first_install");  
lbl16=new JLabel("Date_o_second_install");  
lbl17=new JLabel("Date_o_per_renewal_install");  
lbl18=new JLabel("Security_disposed");  
lbl19=new JLabel("App_sign");  
lbl20=new JLabel("Officer_sign");  
lbl21=new JLabel("Designation");  
  
lbl1.setBounds(20,10,120,25);  
lbl2.setBounds(20,40,120,25);  
lbl3.setBounds(20,70,120,25);  
lbl4.setBounds(20,100,120,25);  
lbl5.setBounds(20,130,120,25);  
  
lbl6.setBounds(20,160,120,25);  
lbl7.setBounds(20,190,120,25);  
lbl8.setBounds(20,220,120,25);  
lbl9.setBounds(20,250,120,25);  
lbl10.setBounds(20,280,120,25);  
lbl11.setBounds(20,310,120,25);  
lbl12.setBounds(400,10,120,25);  
lbl13.setBounds(400,40,120,25);  
lbl14.setBounds(400,70,120,25);  
lbl15.setBounds(400,100,120,25);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl16.setBounds(400,130,120,25);
lbl17.setBounds(400,160,120,25);
lbl18.setBounds(400,190,120,25);
lbl19.setBounds(400,220,120,25);
lbl20.setBounds(400,250,120,25);
lbl21.setBounds(400,280,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
pf.add(lbl12);
pf.add(lbl13);
pf.add(lbl14);
pf.add(lbl15);
pf.add(lbl16);
pf.add(lbl17);
pf.add(lbl18);
pf.add(lbl19);
pf.add(lbl20);
pf.add(lbl21);
```

```
cmb1=new JComboBox();
cmb2=new JComboBox();
txt1=new JTextField();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();
txt13=new JTextField();
txt14=new JTextField();
txt15=new JTextField();
txt16=new JTextField();
txt17=new JTextField();
txt18=new JTextField();
txt19=new JTextField();
txt20=new JTextField();
txt21=new JTextField();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmb1.setBounds(180,10,180,25);
cmb2.setBounds(180,40,180,25);
txt1.setBounds(180,70,180,25);

txt2.setBounds(180,100,180,25);
txt3.setBounds(180,130,180,25);
txt4.setBounds(180,160,180,25);
txt5.setBounds(180,190,180,25);
txt6.setBounds(180,220,180,25);
txt7.setBounds(180,250,180,25);
txt8.setBounds(180,280,180,25);
txt9.setBounds(180,310,180,25);
txt10.setBounds(540,10,180,25);
txt11.setBounds(540,40,180,25);
txt12.setBounds(540,70,180,25);
txt13.setBounds(540,100,180,25);
txt14.setBounds(540,130,180,25);
txt15.setBounds(540,160,180,25);
txt16.setBounds(540,190,180,25);
txt17.setBounds(540,220,180,25);
txt18.setBounds(540,250,180,25);
txt19.setBounds(540,280,180,25);
cmb1.addItemListener(this);
cmb2.addItemListener(this);

pf.add(cmb1);
pf.add(cmb2);
pf.add(txt1);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);
pf.add(txt13);
pf.add(txt14);
pf.add(txt15);
pf.add(txt16);
pf.add(txt17);
pf.add(txt18);
pf.add(txt19);

pm=new JPanel();
pm.setBounds(40,360,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btnl = new JButton("first");
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,360,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,360,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");
lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
pq.add(lblq3);

cmbq1 = new JComboBox();
cmbq2 = new JComboBox();
cmbq3 = new JComboBox();

cmbq1.setBounds(10,34,120,25);
cmbq2.setBounds(140,34,80,25);
cmbq3.setBounds(230,34,160,25);

pq.add(cmbq1);
pq.add(cmbq2);
pq.add(cmbq3);

cmbq1.addItemListener(this);

btn18 = new JButton("search");
btn19 = new JButton("return");

btn18.setBounds(420,30,80,30);
btn19.setBounds(520,30,80,30);

btn18.addActionListener(this);
btn19.addActionListener(this);

pq.add(btn18);
pq.add(btn19);

ps=new JPanel();
ps.setLayout(null);
tab.addTab("show",ps);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn20 = new JButton("return");
btn20.setBounds(520,30,80,30);
btn20.addActionListener(this);
ps.add(btn20);

openrecord();

fillcombo();
fillcombo1();
fillqattribs();
fillqop();
}

void openrecord()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
sql="select * from loan_type_form_detail";
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
else
{
    rp=0;
    clearrecord();
    showrecstatus();
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select type from loan_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
cmb1.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo1()
{
try
{
    stt=cn.createStatement();
    sql="select Form_Id from form_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb2.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo1 exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from loan_type_form_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
}
return r;
}
void showrecord(int rp)
{
try
{
    rs.absolute(rp);
    rs.moveToCurrentRow();
    cmb1.setSelectedItem(rs.getString("type"));
    cmb2.setSelectedItem(String.valueOf(rs.getInt("Form_Id")));

    txt1.setText(String.valueOf(rs.getInt("Ref_no")));
    txt2.setText(rs.getString("To_info"));
    txt3.setText(rs.getString("From_info"));
    txt4.setText(String.valueOf(utility.odate(rs.getDate("Date_o_fill"))));
    txt5.setText(rs.getString("loan_Type"));
    txt6.setText(String.valueOf(utility.odate(rs.getDate("Date_o_receipt"))));
    txt7.setText(String.valueOf(rs.getInt("Cor_sr_no")));
    txt8.setText(rs.getString("Bank_address"));
    txt9.setText(rs.getString("Bank_branch"));
    txt10.setText(String.valueOf(utility.odate(rs.getDate("Date_o_recall"))));
    txt11.setText(String.valueOf(utility.odate(rs.getDate("Date_o_recall_transfer"))));
    txt12.setText(String.valueOf(rs.getInt("Sanction_Amt")));
    txt13.setText(String.valueOf(utility.odate(rs.getDate("Date_o_first_istall"))));
    txt14.setText(String.valueOf(utility.odate(rs.getDate("Date_o_last_istall"))));
    txt15.setText(String.valueOf(utility.odate(rs.getDate("Date_o_per_renewal"))));
    txt16.setText(rs.getString("Security_disposed"));
    txt17.setText(rs.getString("App_sign"));
    txt18.setText(rs.getString("Officer_sign"));
    txt19.setText(rs.getString("Designation"));

    showrecstatus();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

}
void clearrecord()
{
    txt1.setText("");
    txt2.setText("");
    txt3.setText("");
    txt4.setText("");
    txt5.setText("");
    txt6.setText("");
    txt7.setText("");
    txt8.setText("");
    txt9.setText("");
    txt10.setText("");
    txt11.setText("");
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
txt12.setText("");
txt13.setText("");
txt14.setText("");
txt15.setText("");
txt16.setText("");
txt17.setText("");
txt18.setText("");
txt19.setText("");

}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}

void saverecord()
{
    try
    {
        rs.moveToInsertRow();
        rs.updateString("Type",cmb1.getSelectedItem().toString());
        rs.updateInt("Form_Id",Integer.parseInt(cmb2.getSelectedItem().toString()));
        rs.updateInt("Ref_no",Integer.parseInt(txt1.getText()));
        rs.updateString("To_info",txt2.getText());
        rs.updateString("From_info",txt3.getText());
        rs.updateDate("Date_o_fill",utility.jdate(txt4.getText()));
        rs.updateString("loan_Type",txt5.getText());
        rs.updateDate("Date_o_receipt",utility.jdate(txt6.getText()));
        rs.updateInt("Cor_sr_no",Integer.parseInt(txt7.getText()));
        rs.updateString("Bank_address",txt8.getText());
        rs.updateString("Bank_branch",txt9.getText());
        rs.updateDate("Date_o_recall",utility.jdate(txt10.getText()));
        rs.updateDate("Date_o_recall_transfer",utility.jdate(txt11.getText()));
        rs.updateInt("Sanction_Amt",Integer.parseInt(txt12.getText()));
        rs.updateDate("Date_o_first_istall",utility.jdate(txt13.getText()));
        rs.updateDate("Date_o_last_istall",utility.jdate(txt14.getText()));
        rs.updateDate("Date_o_per_renewal",utility.jdate(txt15.getText()));
        rs.updateString("Security_disposed",txt16.getText());
        rs.updateString("App_sign",txt17.getText());
        rs.updateString("Officer_sign",txt18.getText());
        rs.updateString("Designation",txt19.getText());

        rs.insertRow();
        rp=++rc;
        showrecstatus();
        JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

void refreshrecord()
{
    try
    {
        sql="select * from loan_type_form_detail";
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
else
{
    rp=0;
    clearrecord();
    showrecstatus();
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void deleterecord()
{
    if(rc>0)
    {
        try
        {
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
            if(conf==JOptionPane.YES_OPTION)
            {
                rs.deleteRow();
                rc--;
                if(rc==0)
                {
                    rp=0;
                    clearrecord();
                    showrecstatus();
                }
                else if(rp>rc)
                {
                    rp=rc;
                    showrecord(rp);
                }
                else
                    showrecord(rp);
                JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
            }
        }
        catch(Exception e)
        {
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}
void searchrecord()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(cmbq1.getSelectedIndex() >=0 && cmbq2.getSelectedIndex() >=0 &&
cmbq3.getSelectedIndex() >=0)
{
    try
    {
        stt=cn.createStatement();
        sql="select * from loan_type_form_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "'" + cmbq3.getSelectedItem() + "'";
        rst=stt.executeQuery(sql);
        if(rst.next())
            JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
        else
            JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
        rst.close();
        stt.close();
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
    }
}
void showgrecord()
{
    try
    {

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
        sql="select * from loan_type_form_detail";
        rst=stt.executeQuery(sql);
        rct=0;
        while(rst.next()) rct++;
        rm=rst.getMetaData();
        cct=rm.getColumnCount();
        rdt=new Object[rct+1][cct];
        cnm=new Object[cct];
        for(i=0;i<cct;i++)
        {
            cnm[i]=rm.getColumnName(i+1);
            rdt[0][i]=cnm[i];
        }
        for(i=0;i<rct;i++)
        {
            rst.absolute(i+1);
            rst.moveToCurrentRow();
            for(j=0;j<cct;j++)
                rdt[i+1][j]=rst.getObject(j+1);
        }
        if(ts!=null) ps.remove(ts);
        ts=new JTable(rdt,cnm);
        ts.setBounds(10,60,500,360);
        ps.add(ts);
    }
    catch(Exception ex)
    {
        JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
}

void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateString("Type",cmb2.getSelectedItem().toString());
    rs.updateInt("Form_Id",Integer.parseInt(cmb2.getSelectedItem().toString()));
    rs.updateInt("Ref_no",Integer.parseInt(txt1.getText()));
    rs.updateString("To_info",txt2.getText());
    rs.updateString("From_info",txt3.getText());
    rs.updateDate("Date_o_fill",utility.jdate(txt4.getText()));
    rs.updateString("loan_Type",txt5.getText());
    rs.updateDate("Date_o_receipt",utility.jdate(txt6.getText()));
    rs.updateInt("Cor_sr_no",Integer.parseInt(txt7.getText()));
    rs.updateString("Bank_address",txt8.getText());
    rs.updateString("Bank_branch",txt9.getText());
    rs.updateDate("Date_o_recall",utility.jdate(txt10.getText()));
    rs.updateDate("Date_o_recall_transfer",utility.jdate(txt11.getText()));
    rs.updateInt("Sanction_Amt",Integer.parseInt(txt12.getText()));
    rs.updateDate("Date_o_first_install",utility.jdate(txt13.getText()));
    rs.updateDate("Date_o_last_install",utility.jdate(txt14.getText()));
    rs.updateDate("Date_o_per_renewal",utility.jdate(txt15.getText()));
    rs.updateString("Security_disposed",txt16.getText());
    rs.updateString("App_sign",txt17.getText());
    rs.updateString("Officer_sign",txt18.getText());
    rs.updateString("Designation",txt19.getText());

    rs.updateRow();
    JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
    pe.setVisible(false);
    pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}

public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(rc>0 && rp>1)
{
    rp--;
    showrecord(rp);
}

if(e.getSource()==btn3)
{
    if(rc>0 && rp<rc)
    {
        rp++;
        showrecord(rp);
    }
}

if(e.getSource()==btn4)
{
    if(rc>0)
    {
        rp=rc;
        showrecord(rp);
    }
}

if(e.getSource()==btn5)
{
    refreshrecord();
}

if(e.getSource()==btn6)
{
    clearrecord();
    pm.setVisible(false);
    pa.setVisible(true);
}

if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}

if(e.getSource()==btn8)
{
    deleterecord();
}

if(e.getSource()==btn9)
{
    tab.setSelectedIndex(1);
}

if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}

if(e.getSource()==btn11)
{
    setVisible(false);
}

if(e.getSource()==btn12)
{
    saverecord();
}

if(e.getSource()==btn13)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    clearrecord();  
}  
if(e.getSource()==btn14)  
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn15)  
{  
    updaterecord();  
}  
if(e.getSource()==btn16)  
{  
    restorerecord();  
}  
if(e.getSource()==btn17)  
{  
    pe.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn18)  
{  
    searchrecord();  
}  
if(e.getSource()==btn19)  
{  
    tab.setSelectedIndex(0);  
}  
if(e.getSource()==btn20)  
{  
    tab.setSelectedIndex(0);  
}  
}  
public void itemStateChanged(ItemEvent e)  
{  
    if(e.getSource()==cmbq1)  
    {  
        if(cmbq1.getSelectedIndex()>=0)  
        {  
            try  
            {  
                stt=cn.createStatement();  
                sql="select distinct " + cmbq1.getSelectedItem() + " from  
loan_type_form_detail";  
                rst=stt.executeQuery(sql);  
                cmbq3.removeAllItems();  
                while(rst.next())  
                    cmbq3.addItem(rst.getObject(1));  
                rst.close();  
                stt.close();  
            }  
            catch(Exception ex)  
            {  
                JOptionPane.showMessageDialog(this,ex,"query exception"  
,JOptionPane.ERROR_MESSAGE);  
            }  
        }  
    }  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    }
}
public static void main(String args[])
{
    ltfd f;
    f=new ltfd();
    f.show();
}
}
```

\*\*\*\*\***END OF LOANTYPE FORM CODING**\*\*\*\*\*

### SANCTION DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class sanction extends JFrame implements ActionListener,ItemListener
{
    JLabel title, lblq1, lblq2, lblq3;
    JLabel lbl1, lbl2, lbl3, lbl4, lbl5, lbl6, lbl7, lbl8, lbl9, lbl10, lbl11, lbl12, lbl13, lblrs;
    JLabel lbl14, lbl15, lbl16, lbl17, lbl18, lbl19, lbl20, lbl21, lbl22;
    JTextField
txt1,txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15,txt16,tx
t17,txt18,txt19,txt20,txt21,txt22;

    JComboBox cmbq1,cmbq2,cmbq3,cmb1,cmb2,cmb3;
    JButton
btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,bt
n17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    sanction()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : SANCTION DETAIL");
    setBounds(10,10,780,560);
    setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
    c=ContentPane();
    c.setLayout(null);
    c.setBackground(Color.black);
    title=new JLabel("SANCTION DETAIL INFORMATION",JLabel.CENTER);
    title.setFont(new Font("Arial",Font.BOLD,24));
    title.setForeground(Color.green);
    title.setBounds(0,0,780,30);
    c.add(title);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
tab=new JTabbedPane();
tab.setBounds(5,30,760,495);
c.add(tab);

pf=new JPanel();
pf.setLayout(null);
tab.addTab("SANCTION DETAIL FORM",pf);

lbl1=new JLabel("Loan type");
lbl2=new JLabel("App_code");
lbl3=new JLabel("Ac_Id");
lbl4=new JLabel("To_info");
lbl5=new JLabel("From_info");
lbl6=new JLabel("Date_o_sanction");
lbl7=new JLabel("Bank_code");
lbl8=new JLabel("Bank_branch");
lbl9=new JLabel("Sl_no");
lbl10=new JLabel("Officer_name");
lbl11=new JLabel("Designation");
lbl12=new JLabel("Total services");
lbl13=new JLabel("Amount");
lbl14=new JLabel("Applicant_income");
lbl15=new JLabel("Security");
lbl16=new JLabel("Repayment_prog");
lbl17=new JLabel("Remarks");
lbl18=new JLabel("Branch Manager");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);

lbl6.setBounds(20,160,120,25);
lbl7.setBounds(20,190,120,25);
lbl8.setBounds(20,220,120,25);
lbl9.setBounds(20,250,120,25);
lbl10.setBounds(20,280,120,25);
lbl11.setBounds(20,310,120,25);
lbl12.setBounds(400,10,120,25);
lbl13.setBounds(400,40,120,25);
lbl14.setBounds(400,70,120,25);
lbl15.setBounds(400,100,120,25);
lbl16.setBounds(400,130,120,25);
lbl17.setBounds(400,160,120,25);
lbl18.setBounds(400,190,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf.add(lbl12);
pf.add(lbl13);
pf.add(lbl14);
pf.add(lbl15);
pf.add(lbl16);
pf.add(lbl17);
pf.add(lbl18);
```

```
cmb1=new JComboBox();
cmb2=new JComboBox();
cmb3=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();
txt13=new JTextField();
txt14=new JTextField();
txt15=new JTextField();
txt16=new JTextField();
txt17=new JTextField();
txt18=new JTextField();
txt19=new JTextField();
txt20=new JTextField();
txt21=new JTextField();
```

```
cmb1.setBounds(180,10,180,25);
cmb2.setBounds(180,40,180,25);
cmb3.setBounds(180,70,180,25);
txt2.setBounds(180,100,180,25);
txt3.setBounds(180,130,180,25);
txt4.setBounds(180,160,180,25);
txt5.setBounds(180,190,180,25);
txt6.setBounds(180,220,180,25);
txt7.setBounds(180,250,180,25);
txt8.setBounds(180,280,180,25);
txt9.setBounds(180,310,180,25);
txt10.setBounds(540,10,180,25);
txt11.setBounds(540,40,180,25);
txt12.setBounds(540,70,180,25);
txt13.setBounds(540,100,180,25);
txt14.setBounds(540,130,180,25);
txt15.setBounds(540,160,180,25);
txt16.setBounds(540,190,180,25);
cmb1.addItemListener(this);
cmb2.addItemListener(this);
cmb3.addItemListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pf.add(cmb1);
pf.add(cmb2);
pf.add(cmb3);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);
pf.add(txt13);
pf.add(txt14);
pf.add(txt15);
pf.add(txt16);
```

```
pm=new JPanel();
pm.setBounds(40,360,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,360,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,360,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);

pq=new JPanel();
pq.setLayout(null);
tab.addTab("query",pq);

lblq1 = new JLabel("Query Attributes");

lblq2 = new JLabel("Query Op.");
lblq3 = new JLabel("Query Data");

lblq1.setBounds(10,4,120,25);
lblq2.setBounds(140,4,80,25);
lblq3.setBounds(230,4,160,25);

pq.add(lblq1);
pq.add(lblq2);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    pq.add(lblq3);

    cmbq1 = new JComboBox();
    cmbq2 = new JComboBox();
    cmbq3 = new JComboBox();

    cmbq1.setBounds(10,34,120,25);
    cmbq2.setBounds(140,34,80,25);
    cmbq3.setBounds(230,34,160,25);

    pq.add(cmbq1);
    pq.add(cmbq2);
    pq.add(cmbq3);

    cmbq1.addItemListener(this);

    btn18 = new JButton("search");
    btn19 = new JButton("return");

    btn18.setBounds(420,30,80,30);
    btn19.setBounds(520,30,80,30);

    btn18.addActionListener(this);
    btn19.addActionListener(this);

    pq.add(btn18);
    pq.add(btn19);

    ps=new JPanel();
    ps.setLayout(null);
    tab.addTab("show",ps);

    btn20 = new JButton("return");

    btn20.setBounds(520,30,80,30);
    btn20.addActionListener(this);

    ps.add(btn20);

    openrecord();

    fillcombo();
    fillcombo1();
    fillcombo2();

    fillqattribs();
    fillqop();
}
void openrecord()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");

        st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);
        sql="select * from sanction_detail";
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
if(!isempty())
{
    rp=1;
    showrecord(rp);
}
else
{
    rp=0;
    clearrecord();
    showrecstatus();
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"openrecord exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo()
{
try
{
    stt=cn.createStatement();
    sql="select type from loan_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb1.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo1()
{
try
{
    stt=cn.createStatement();
    sql="select App_code from applicant_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb2.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo1 exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo2()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    stt=cn.createStatement();
    sql="select Ac_Id from account_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
        cmb3.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo2 exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
    {
        stt=cn.createStatement();
        sql="select * from sanction_detail";
        rst=stt.executeQuery(sql);
        if(rst.next())
            r=false;
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"isempty exception"
,JOptionPane.ERROR_MESSAGE);
    }
    return r;
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void showrecord(int rp)
{
    try
    {
        rs.absolute(rp);
        rs.moveToCurrentRow();
        cmb1.setSelectedItem(rs.getString("type"));
        cmb2.setSelectedItem(String.valueOf(rs.getInt("App_code")));
        cmb3.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));
        txt2.setText(rs.getString("To_info"));
        txt3.setText(rs.getString("From_info"));
        txt4.setText(String.valueOf(utilityodate(rs.getDate("Date_o_santion"))));
        txt5.setText(String.valueOf(rs.getInt("Bank_code")));
        txt6.setText(rs.getString("Bank_branch"));
        txt7.setText(String.valueOf(rs.getInt("Sl_no")));
        txt8.setText(rs.getString("Officer_name"));
        txt9.setText(rs.getString("Designation"));
        txt10.setText(rs.getString("Total_setvices"));
        txt11.setText(String.valueOf(rs.getInt("Amount")));
        txt12.setText(String.valueOf(rs.getInt("Applicant_income")));
        txt13.setText(rs.getString("Security"));
        txt14.setText(rs.getString("Repayment_prog"));
        txt15.setText(rs.getString("Remarks"));
        txt16.setText(rs.getString("Branch_Manager"));

        showrecstatus();
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

void clearrecord()
{

txt2.setText("");
txt3.setText("");
txt4.setText("");
txt5.setText("");
txt6.setText("");
txt7.setText("");
txt8.setText("");
txt9.setText("");
txt10.setText("");
txt11.setText("");
txt12.setText("");
txt13.setText("");
txt14.setText("");
txt15.setText("");
txt16.setText("");

}

void showrecstatus()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lblrs.setText(rp + "/" + rc);
}
void saverecord()
{
try
{
    rs.moveToInsertRow();
    rs.updateString("Type",cmb1.getSelectedItem().toString());
    rs.updateInt("App_code",Integer.parseInt(cmb2.getSelectedItem().toString()));
    rs.updateInt("Ac_Id",Integer.parseInt(cmb3.getSelectedItem().toString()));
    rs.updateString("To_info",txt2.getText());
    rs.updateString("From_info",txt3.getText());
    rs.updateDate("Date_o_santion",utility.jdate(txt4.getText()));
    rs.updateInt("Bank_code",Integer.parseInt(txt5.getText()));
    rs.updateString("Bank_branch",txt6.getText());
    rs.updateInt("Sl_no",Integer.parseInt(txt7.getText()));
    rs.updateString("Officer_name",txt8.getText());
    rs.updateString("Designation",txt9.getText());
    rs.updateString("Total_setvices",txt10.getText());
    rs.updateInt("Amount",Integer.parseInt(txt11.getText()));
    rs.updateInt("Applicant_income",Integer.parseInt(txt12.getText()));
    rs.updateString("Security",txt13.getText());
    rs.updateString("Repayment_prog",txt14.getText());
    rs.updateString("Remarks",txt15.getText());
    rs.updateString("Branch_Manager",txt16.getText());

    rs.insertRow();
    rp=++rc;
    showrecstatus();
    JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
}

void refreshrecord()
{
try
{
    sql="select * from sanction_detail";
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    if(!isempty())
    {
        rp=1;
        showrecord(rp);
    }

    else
    {
        rp=0;
        clearrecord();
        showrecstatus();
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"
,JOptionPane.ERROR_MESSAGE);
}

void deleterecord()
{
    if(rc>0)
    {
        try
        {
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this
record?","delete confirmation",JOptionPane.YES_NO_OPTION);
            if(conf==JOptionPane.YES_OPTION)
            {
                rs.deleteRow();
                rc--;
                if(rc==0)
                {
                    rp=0;
                    clearrecord();
                    showrecstatus();
                }
                else if(rp>rc)
                {
                    rp=rc;
                    showrecord(rp);
                }
                else
                    showrecord(rp);
                JOptionPane.showMessageDialog(this,"record deleted","delete result"
,JOptionPane.INFORMATION_MESSAGE);
            }
        }
        catch(Exception e)
        {
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"
,JOptionPane.ERROR_MESSAGE);
        }
    }
}

void searchrecord()
{
    if(cmbq1.getSelectedIndex() >=0 && cmbq2.getSelectedIndex() >=0 &&
cmbq3.getSelectedIndex() >=0)
    {
        try
        {
            stt=cn.createStatement();
            sql="select * from sanction_detail where " + cmbq1.getSelectedItem() +
cmbq2.getSelectedItem() + "'" + cmbq3.getSelectedItem() + "'";
            rst=stt.executeQuery(sql);
            if(rst.next())
                JOptionPane.showMessageDialog(this,"record found","search result"
,JOptionPane.INFORMATION_MESSAGE);
            else

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JOptionPane.showMessageDialog(this,"record not found","search result"
,JOptionPane.INFORMATION_MESSAGE);
    rst.close();
    stt.close();
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void showgrecord()
{
try
{
stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from sanction_detail";
    rst=stt.executeQuery(sql);
    rct=0;
    while(rst.next()) rct++;
    rm=rst.getMetaData();
    cct=rm.getColumnCount();
    rdt=new Object[rct+1][cct];
    cnm=new Object[cct];
    for(i=0;i<cct;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rct;i++)
    {
        rst.absolute(i+1);
        rst.moveToCurrentRow();
        for(j=0;j<cct;j++)
            rdt[i+1][j]=rst.getObject(j+1);
    }
    if(ts!=null) ps.remove(ts);
    ts=new JTable(rdt,cnm);
    ts.setBounds(10,60,500,360);
    ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();
    rs.updateString("Type",cmb1.getSelectedItem().toString());
    rs.updateInt("App_code",Integer.parseInt(cmb2.getSelectedItem().toString()));
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.updateInt("Ac_Id", Integer.parseInt(cmb3.getSelectedItem().toString()));
rs.updateString("To_info", txt2.getText());
rs.updateString("From_info", txt3.getText());
rs.updateDate("Date_o_santion", utility.jdate(txt4.getText()));
rs.updateInt("Bank_code", Integer.parseInt(txt5.getText()));
rs.updateString("Bank_branch", txt6.getText());
rs.updateInt("Sl_no", Integer.parseInt(txt7.getText()));
rs.updateString("Officer_name", txt8.getText());
rs.updateString("Designation", txt9.getText());
rs.updateString("Total_setvices", txt10.getText());
rs.updateInt("Amount", Integer.parseInt(txt11.getText()));
rs.updateInt("Applicant_income", Integer.parseInt(txt12.getText()));
rs.updateString("Security", txt13.getText());
rs.updateString("Repayment_prog", txt14.getText());
rs.updateString("Remarks", txt15.getText());
rs.updateString("Branch_Manager", txt16.getText());

rs.updateRow();
JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
pe.setVisible(false);
pm.setVisible(true);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
if(e.getSource()==btn1)
{
    if(rc>0)
    {
        rp=1;
        showrecord(rp);
    }
}
if(e.getSource()==btn2)
{
    if(rc>0 && rp>1)
    {
        rp--;
        showrecord(rp);
    }
}
if(e.getSource()==btn3)
{
    if(rc>0 && rp<rc)
    {
        rp++;
        showrecord(rp);
    }
}
if(e.getSource()==btn4)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(rc>0)
{
    rp=rc;
    showrecord(rp);
}
if(e.getSource()==btn5)
{
    refreshrecord();
}
if(e.getSource()==btn6)
{
    clearrecord();
    pm.setVisible(false);
    pa.setVisible(true);
}
if(e.getSource()==btn7)
{
    pm.setVisible(false);
    pe.setVisible(true);
}
if(e.getSource()==btn8)
{
    deleterecord();
}
if(e.getSource()==btn9)
{
    tab.setSelectedIndex(1);
}
if(e.getSource()==btn10)
{
    showgrecord();
    tab.setSelectedIndex(2);
}
if(e.getSource()==btn11)
{
    setVisible(false);
}
if(e.getSource()==btn12)
{
    saverecord();
}
if(e.getSource()==btn13)
{
    clearrecord();
}
if(e.getSource()==btn14)
{
    if(rp>0 && rc>0) showrecord(rp);
    pa.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn15)
{
    updaterecord();
}
if(e.getSource()==btn16)
{
    restorerecord();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

if(e.getSource()==btn17)
{

    pe.setVisible(false);
    pm.setVisible(true);
}
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from sanction_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
public static void main(String args[])
{
    sanction f;
    f=new sanction();
    f.show();
}
```

\*\*\*\*\*END OF SANCTION DETAIL FORM CODING\*\*\*\*\*

REPAYMENT DETAIL FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class repayment extends JFrame implements ActionListener,ItemListener
{
    JLabel title,lblq1,lblq2,lblq3;
    JLabel
    lbl1,lbl2,lbl3,lbl4,lbl5,lbl6,lbl7,lbl8,lbl9,lbl10,lbl11,lbl12,lbl13,lbl14,lbl15,lblr;
    JTextField
    txt1,txt2,txt3,txt4,txt5,txt6,txt7,txt8,txt9,txt10,txt11,txt12,txt13,txt14,txt15;

    JComboBox cmbq1,cmbq2,cmbq3,cmb1,cmb2,cmb3;
    JButton
    btn1,btn2,btn3,btn4,btn5,btn6,btn7,btn8,btn9,btn10,btn11,btn12,btn13,btn14,btn15,btn16,btn17,btn18,btn19,btn20;
    JTabbedPane tab;
    JPanel pf,pm,pa,pe,pq,ps;
    Container c;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rp,rc,i,j,cct,rct;
    String sql;
    JTable ts;
    Object cnm[],rdt[][][];
    repayment()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I : REPAYMENT DETAIL");
        setBounds(10,10,780,560);
        setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);
        c=ContentPane();
        c.setLayout(null);
        c.setBackground(Color.black);
        title=new JLabel("REPAYMENT DETAIL INFORMATION",JLabel.CENTER);
        title.setFont(new Font("Arial",Font.BOLD,24));
        title.setForeground(Color.green);
        title.setBounds(0,0,780,30);
        c.add(title);

        tab=new JTabbedPane();
        tab.setBounds(5,30,760,495);
        c.add(tab);

        pf=new JPanel();
        pf.setLayout(null);
        tab.addTab("REPAYMENT DETAIL FORM",pf);

        lbl1=new JLabel("Loan type");
        lbl2=new JLabel("Ac_Id");
        lbl3=new JLabel("App_code");
        lbl4=new JLabel("KeyNameOfBorrower");
        lbl5=new JLabel("Amount detail");
        lbl6=new JLabel("Interest rate");
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
lbl7=new JLabel("Partycular");
lbl8=new JLabel("Adjust Date");
lbl9=new JLabel("Debits");
lbl10=new JLabel("Credits");
lbl11=new JLabel("Remarks");
lbl12=new JLabel("To_info");
lbl13=new JLabel("From_info");
lbl14=new JLabel("Branch Manager");

lbl1.setBounds(20,10,120,25);
lbl2.setBounds(20,40,120,25);
lbl3.setBounds(20,70,120,25);
lbl4.setBounds(20,100,120,25);
lbl5.setBounds(20,130,120,25);
lbl6.setBounds(20,160,120,25);
lbl7.setBounds(20,190,120,25);
lbl8.setBounds(400,10,120,25);
lbl9.setBounds(400,40,120,25);
lbl10.setBounds(400,70,120,25);
lbl11.setBounds(400,100,120,25);
lbl12.setBounds(400,130,120,25);
lbl13.setBounds(400,160,120,25);
lbl14.setBounds(400,190,120,25);

pf.add(lbl1);
pf.add(lbl2);
pf.add(lbl3);
pf.add(lbl4);
pf.add(lbl5);
pf.add(lbl6);
pf.add(lbl7);
pf.add(lbl8);
pf.add(lbl9);
pf.add(lbl10);
pf.add(lbl11);
pf.add(lbl12);
pf.add(lbl13);
pf.add(lbl14);
```

```
cmb1=new JComboBox();
cmb2=new JComboBox();
cmb3=new JComboBox();
txt2=new JTextField();
txt3=new JTextField();
txt4=new JTextField();
txt5=new JTextField();
txt6=new JTextField();
txt7=new JTextField();
txt8=new JTextField();
txt9=new JTextField();
txt10=new JTextField();
txt11=new JTextField();
txt12=new JTextField();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmb1.setBounds(180,10,180,25);
cmb2.setBounds(180,40,180,25);
cmb3.setBounds(180,70,180,25);
txt2.setBounds(180,100,180,25);
txt3.setBounds(180,130,180,25);
txt4.setBounds(180,160,180,25);
txt5.setBounds(180,190,180,25);
txt6.setBounds(540,10,180,25);
txt7.setBounds(540,40,180,25);
txt8.setBounds(540,70,180,25);
txt9.setBounds(540,100,180,25);
txt10.setBounds(540,130,180,25);
txt11.setBounds(540,160,180,25);
txt12.setBounds(540,190,180,25);

cmb1.addItemListener(this);
cmb2.addItemListener(this);
cmb3.addItemListener(this);

pf.add(cmb1);
pf.add(cmb2);
pf.add(cmb3);
pf.add(txt2);
pf.add(txt3);
pf.add(txt4);
pf.add(txt5);
pf.add(txt6);
pf.add(txt7);
pf.add(txt8);
pf.add(txt9);
pf.add(txt10);
pf.add(txt11);
pf.add(txt12);

pm=new JPanel();
pm.setBounds(40,360,560,80);
pm.setLayout(new GridLayout(2,6));
pf.add(pm);

lblrs= new JLabel("0/0",JLabel.CENTER);
btn1 = new JButton("first");
btn2 = new JButton("prev");
btn3 = new JButton("next");
btn4 = new JButton("last");
btn5 = new JButton("refresh");
btn6 = new JButton("add");
btn7 = new JButton("edit");
btn8 = new JButton("delete");
btn9 = new JButton("query");
btn10 = new JButton("show");
btn11 = new JButton("close");

btn1.addActionListener(this);
btn2.addActionListener(this);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btn3.addActionListener(this);
btn4.addActionListener(this);
btn5.addActionListener(this);
btn6.addActionListener(this);
btn7.addActionListener(this);
btn8.addActionListener(this);
btn9.addActionListener(this);
btn10.addActionListener(this);
btn11.addActionListener(this);

pm.add(lblrs);
pm.add(btn1);
pm.add(btn2);
pm.add(btn3);
pm.add(btn4);
pm.add(btn5);
pm.add(btn6);
pm.add(btn7);
pm.add(btn8);
pm.add(btn9);
pm.add(btn10);
pm.add(btn11);

pa=new JPanel();
pa.setBounds(360,360,290,40);
pa.setLayout(new GridLayout(1,3));
pf.add(pa);
pa.setVisible(false);

btn12 = new JButton("save");
btn13 = new JButton("new");
btn14 = new JButton("return");

btn12.addActionListener(this);
btn13.addActionListener(this);
btn14.addActionListener(this);

pa.add(btn12);
pa.add(btn13);
pa.add(btn14);

pe=new JPanel();
pe.setBounds(140,360,290,40);
pe.setLayout(new GridLayout(1,3));
pf.add(pe);
pe.setVisible(false);

btn15 = new JButton("update");
btn16 = new JButton("restore");
btn17 = new JButton("cancel");

btn15.addActionListener(this);
btn16.addActionListener(this);
btn17.addActionListener(this);

pe.add(btn15);
pe.add(btn16);
pe.add(btn17);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
 pq=new JPanel();
 pq.setLayout(null);
 tab.addTab("query",pq);

 lblq1 = new JLabel("Query Attributes");
 lblq2 = new JLabel("Query Op.");
 lblq3 = new JLabel("Query Data");

 lblq1.setBounds(10,4,120,25);
 lblq2.setBounds(140,4,80,25);
 lblq3.setBounds(230,4,160,25);

 pq.add(lblq1);
 pq.add(lblq2);
 pq.add(lblq3);

 cmbq1 = new JComboBox();
 cmbq2 = new JComboBox();
 cmbq3 = new JComboBox();

 cmbq1.setBounds(10,34,120,25);
 cmbq2.setBounds(140,34,80,25);
 cmbq3.setBounds(230,34,160,25);

 pq.add(cmbq1);
 pq.add(cmbq2);
 pq.add(cmbq3);

 cmbq1.addItemListener(this);

 btn18 = new JButton("search");
 btn19 = new JButton("return");

 btn18.setBounds(420,30,80,30);
 btn19.setBounds(520,30,80,30);

 btn18.addActionListener(this);
 btn19.addActionListener(this);

 pq.add(btn18);
 pq.add(btn19);

 ps=new JPanel();
 ps.setLayout(null);
 tab.addTab("show",ps);

 btn20 = new JButton("return");

 btn20.setBounds(520,30,80,30);

 btn20.addActionListener(this);

 ps.add(btn20);

 openrecord();

 fillcombo();
 fillcombo1();
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
fillcombo2();  
  
fillqattribs();  
fillqop();  
}  
void openrecord()  
{  
try  
{  
cn=odbc.connect("mukesh_dsn", "mukesh", "dream");  
  
st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_UPDATABLE);  
sql="select * from repayment_detail";  
rs=st.executeQuery(sql);  
rc=0;  
while(rs.next()) rc++;  
if(!isempty())  
{  
rp=1;  
showrecord(rp);  
}  
else  
{  
rp=0;  
clearrecord();  
showrecstatus();  
}  
}  
catch(Exception e)  
{  
JOptionPane.showMessageDialog(this,e,"openrecord exception"  
, JOptionPane.ERROR_MESSAGE);  
}  
}  
void fillcombo()  
{  
try  
{  
stt=cn.createStatement();  
sql="select type from loan_detail";  
rst=stt.executeQuery(sql);  
while(rst.next())  
cmb1.addItem(rst.getString(1));  
rst.close();  
stt.close();  
}  
catch(Exception e)  
{  
JOptionPane.showMessageDialog(this,e,"fillcombo exception"  
, JOptionPane.ERROR_MESSAGE);  
}  
}  
void fillcombo1()  
{  
try  
{  
stt=cn.createStatement();  
sql="select Ac_Id from account_detail";  
rst=stt.executeQuery(sql);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
while(rst.next())
cmb2.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo1 exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillcombo2()
{
try
{
    stt=cn.createStatement();
    sql="select App_code from applicant_detail";
    rst=stt.executeQuery(sql);
    while(rst.next())
    cmb3.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo2 exception"
,JOptionPane.ERROR_MESSAGE);
}
}
```

```
void fillqattribs()
{
try
{
    rm=rs.getMetaData();
    for(i=0;i<rm.getColumnCount();i++)
        cmbq1.addItem(rm.getColumnName(i+1));
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillqattrib exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void fillqop()
{
    cmbq2.addItem("=");
    cmbq2.addItem("<");
    cmbq2.addItem(">");
    cmbq2.addItem("<=");
    cmbq2.addItem(">=");
    cmbq2.addItem("!=");
}
boolean isempty()
{
    boolean r=true;
    try
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    stt=cn.createStatement();  
    sql="select * from repayment_detail";  
    rst=stt.executeQuery(sql);  
    if(rst.next())  
        r=false;  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"isempty exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
return r;  
}  
void showrecord(int rp)  
{  
try  
{  
    rs.absolute(rp);  
    rs.moveToCurrentRow();  
    cmb1.setSelectedItem(rs.getString("type"));  
    cmb2.setSelectedItem(String.valueOf(rs.getInt("Ac_Id")));  
    cmb3.setSelectedItem(String.valueOf(rs.getInt("App_code")));  
    txt2.setText(rs.getString("KeyNameOfBorrower"));  
    txt3.setText(String.valueOf(rs.getInt("Amount_detail")));  
    txt4.setText(String.valueOf(rs.getInt("Interest_Rate")));  
    txt5.setText(rs.getString("Particular"));  
    txt6.setText(String.valueOf(utilityodate(rs.getDate("Adjust_date"))));  
    txt7.setText(String.valueOf(rs.getInt("Debits")));  
    txt8.setText(String.valueOf(rs.getInt("Credits")));  
    txt9.setText(rs.getString("Remarks"));  
    txt10.setText(rs.getString("To_info"));  
    txt11.setText(rs.getString("From_info"));  
    txt12.setText(rs.getString("Branch_Manager"));  
  
    showrecstatus();  
}  
catch(Exception e)  
{  
    JOptionPane.showMessageDialog(this,e,"saverecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
}  
void clearrecord()  
{  
  
    txt2.setText("");  
    txt3.setText("");  
    txt4.setText("");  
    txt5.setText("");  
    txt6.setText("");  
    txt7.setText("");  
    txt8.setText("");  
    txt9.setText("");  
    txt10.setText("");  
    txt11.setText("");  
    txt12.setText("");  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void showrecstatus()
{
    lblrs.setText(rp + "/" + rc);
}

void saverecord()
{
    try
    {
        rs.moveToInsertRow();
        rs.updateString("Type", cmb1.getSelectedItem().toString());
        rs.updateInt("Ac_Id", Integer.parseInt(cmb3.getSelectedItem().toString()));
        rs.updateInt("App_code", Integer.parseInt(cmb2.getSelectedItem().toString()));
        rs.updateString("KEYNAMEOFBORROWER", txt2.getText());
        rs.updateInt("Amount_detail", Integer.parseInt(txt3.getText()));
        rs.updateInt("Interest_Rate", Integer.parseInt(txt4.getText()));
        rs.updateString("Particular", txt5.getText());
        rs.updateDate("Adjust_Date", utility.jdate(txt6.getText()));
        rs.updateInt("Debits", Integer.parseInt(txt7.getText()));
        rs.updateInt("Credits", Integer.parseInt(txt8.getText()));
        rs.updateString("Remarks", txt9.getText());
        rs.updateString("To_info", txt10.getText());
        rs.updateString("From_info", txt11.getText());
        rs.updateString("Branch_Manager", txt12.getText());

        rs.insertRow();
        rp=++rc;
        showrecstatus();
        JOptionPane.showMessageDialog(this,"record saved","save result"
,JOptionPane.INFORMATION_MESSAGE);
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"saverecord exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

void refreshrecord()
{
    try
    {
        sql="select * from repayment_detail";
        rs=st.executeQuery(sql);
        rc=0;
        while(rs.next()) rc++;
        if(!isempty())
        {
            rp=1;
            showrecord(rp);
        }
        else
        {
            rp=0;
            clearrecord();
            showrecstatus();
        }
    }
    catch(Exception e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JOptionPane.showMessageDialog(this,e,"refreshrecord exception"  
,JOptionPane.ERROR_MESSAGE);  
}  
}  
void deleterecord()  
{  
    if(rc>0)  
    {  
        try  
        {  
            int conf=JOptionPane.showConfirmDialog(this,"are you sure to delete this  
record?","delete confirmation",JOptionPane.YES_NO_OPTION);  
            if(conf==JOptionPane.YES_OPTION)  
            {  
                rs.deleteRow();  
                rc--;  
                if(rc==0)  
                {  
                    rp=0;  
                    clearrecord();  
                    showrecstatus();  
                }  
                else if(rp>rc)  
                {  
                    rp=rc;  
                    showrecord(rp);  
                }  
                else  
                    showrecord(rp);  
                JOptionPane.showMessageDialog(this,"record deleted","delete result"  
,JOptionPane.INFORMATION_MESSAGE);  
            }  
        }  
        catch(Exception e)  
  
        {  
            JOptionPane.showMessageDialog(this,e,"deleterecord exception"  
,JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}  
void searchrecord()  
{  
    if(cmbq1.getSelectedIndex()>=0 && cmbq2.getSelectedIndex()>=0 &&  
cmbq3.getSelectedIndex()>=0)  
    {  
        try  
        {  
            stt=cn.createStatement();  
            sql="select * from repayment_detail where " + cmbq1.getSelectedItem() +  
cmbq2.getSelectedItem() + "''" + cmbq3.getSelectedItem() + "''";  
            rst=stt.executeQuery(sql);  
            if(rst.next())  
                JOptionPane.showMessageDialog(this,"record found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
            else  
                JOptionPane.showMessageDialog(this,"record not found","search result"  
,JOptionPane.INFORMATION_MESSAGE);  
        }
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rst.close();
stt.close();
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"search exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void showgrecord()
{
try
{

stt=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
sql="select * from repayment_detail";
rst=stt.executeQuery(sql);
rct=0;
while(rst.next()) rct++;
rm=rst.getMetaData();
cct=rm.getColumnCount();
rdt=new Object[rct+1][cct];
cnm=new Object[cct];
for(i=0;i<cct;i++)
{
    cnm[i]=rm.getColumnName(i+1);
    rdt[0][i]=cnm[i];
}
for(i=0;i<rct;i++)
{
    rst.absolute(i+1);
    rst.moveToCurrentRow();
    for(j=0;j<cct;j++)
        rdt[i+1][j]=rst.getObject(j+1);
}
if(ts!=null) ps.remove(ts);
ts=new JTable(rdt,cnm);
ts.setBounds(10,60,500,360);
ps.add(ts);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
void restorerecord()
{
    showrecord(rp);
}
void updaterecord()
{
try
{
    rs.moveToCurrentRow();

    rs.updateString("Type",cmb1.getSelectedItem().toString());
    rs.updateInt("Ac_Id",Integer.parseInt(cmb3.getSelectedItem().toString()));
    rs.updateInt("App_code",Integer.parseInt(cmb2.getSelectedItem().toString()));
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rs.updateString("KeyNameOfBorrower",txt2.getText());
rs.updateInt("Amount_detail",Integer.parseInt(txt3.getText()));
rs.updateInt("Interest_Rate",Integer.parseInt(txt4.getText()));
rs.updateString("Particular",txt5.getText());

rs.updateDate("Adjust_Date",utility.jdate(txt6.getText()));
rs.updateInt("Debits",Integer.parseInt(txt7.getText()));
rs.updateInt("Credits",Integer.parseInt(txt8.getText()));
rs.updateString("Remarks",txt9.getText());
rs.updateString("To_info",txt10.getText());
rs.updateString("From_info",txt11.getText());
rs.updateString("Branch_Manager",txt12.getText());
rs.updateRow();

JOptionPane.showMessageDialog(this,"record updated","update result"
,JOptionPane.INFORMATION_MESSAGE);
pe.setVisible(false);
pm.setVisible(true);
}

catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"update exception"
,JOptionPane.ERROR_MESSAGE);
}
}

public void actionPerformed(ActionEvent e)
{
    if(e.getSource()==btn1)
    {
        if(rc>0)
        {
            rp=1;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn2)
    {
        if(rc>0 && rp>1)
        {
            rp--;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn3)
    {
        if(rc>0 && rp<rc)
        {
            rp++;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn4)
    {
        if(rc>0)
        {
            rp=rc;
            showrecord(rp);
        }
    }
    if(e.getSource()==btn5)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    refreshrecord();  
}  
if(e.getSource()==btn6)  
{  
    clearrecord();  
    pm.setVisible(false);  
    pa.setVisible(true);  
}  
if(e.getSource()==btn7)  
{  
    pm.setVisible(false);  
    pe.setVisible(true);  
}  
if(e.getSource()==btn8)  
{  
    deleterecord();  
}  
if(e.getSource()==btn9)  
{  
    tab.setSelectedIndex(1);  
}  
if(e.getSource()==btn10)  
{  
    showgrecord();  
    tab.setSelectedIndex(2);  
}  
if(e.getSource()==btn11)  
{  
    setVisible(false);  
}  
if(e.getSource()==btn12)  
{  
    saverecord();  
}  
if(e.getSource()==btn13)  
{  
    clearrecord();  
}  
  
if(e.getSource()==btn14)  
{  
    if(rp>0 && rc>0) showrecord(rp);  
    pa.setVisible(false);  
    pm.setVisible(true);  
}  
if(e.getSource()==btn15)  
{  
    updaterecord();  
}  
if(e.getSource()==btn16)  
{  
    restorerecord();  
}  
if(e.getSource()==btn17)  
{  
    pe.setVisible(false);  
    pm.setVisible(true);  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(e.getSource()==btn18)
{
    searchrecord();
}
if(e.getSource()==btn19)
{
    tab.setSelectedIndex(0);
}
if(e.getSource()==btn20)
{
    tab.setSelectedIndex(0);
}
}
public void itemStateChanged(ItemEvent e)
{
    if(e.getSource()==cmbq1)
    {
        if(cmbq1.getSelectedIndex() >=0)
        {
            try
            {
                stt=cn.createStatement();
                sql="select distinct " + cmbq1.getSelectedItem() + " from repayment_detail";
                rst=stt.executeQuery(sql);
                cmbq3.removeAllItems();
                while(rst.next())
                    cmbq3.addItem(rst.getObject(1));
                rst.close();
                stt.close();
            }
            catch(Exception ex)
            {
                JOptionPane.showMessageDialog(this,ex,"query exception"
,JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
public static void main(String args[])
{
    repayment f;
    f=new repayment();
    f.show();
}
```

\*\*\*\*\*END OF REPAYMENT DETAIL FORM CODING\*\*\*\*\*

## DATABASE CREATION FORM CODING

```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.sql.*;
class cdb1 extends JFrame implements ActionListener
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
JList lm;  
JButton btn1;  
Container c;  
  
Connection cn;  
Statement st;  
ResultSet rs;  
String sql,msgs[]={},unm="mukesh_test",upwd="dream";  
int notabs=100,count=0;  
  
cdb1()  
{  
    setTitle("SYSTEM FOR LOAN MANAGEMENT FIR THE BRANCH OF S.B.I.,GUMLA JHARKHAND:  
database creation");  
    setBounds(250,200,400,300);  
    setDefaultCloseOperation(WindowConstants.HIDE_ON_CLOSE);  
    c=getContentPane();  
    c.setLayout(null);  
    c.setBackground(Color.black);  
    btn1=new JButton("create database");  
    btn1.setBounds(10,10,480,45);  
    btn1.addActionListener(this);  
    c.add(btn1);  
    msgs=new String[notabs+5];  
}  
public void actionPerformed(ActionEvent e)  
{  
    if(e.getSource()==btn1)  
    {  
        createdatabase();  
    }  
}  
public void createdatabase()  
{  
    try  
    {  
        cn=odbc.connect("mukesh_dsn","mukesh","dream");  
        st=cn.createStatement();  
    }  
    catch(Exception ex)  
    {  
        msgs[count++]=ex.getMessage();  
    }  
    try  
    {  
        sql="drop user " + unm + " cascade";  
        st.execute(sql);  
        msgs[count++]="old user dropped successfully";  
    }  
    catch(Exception ex)  
    {  
        msgs[count++]=ex.getMessage();  
    }  
  
    try  
    {  
        sql="create user " + unm + " identified by " + upwd;  
        st.execute(sql);  
    }
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
msgs[count++]="new user created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}
try
{
    sql="grant dba to " + unm;
    st.execute(sql);
    msgs[count++]="grant to user is successful";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    cn.close();
    st.close();
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    cn=odbc.connect("mukesh_dsn",unm,upwd);
    st=cn.createStatement();
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table loan_detail(sl_no number(2) unique not null,type varchar2(25)
primary key,purpose varchar2(25) not null,eligibility varchar2(25) not null,amount
number(10) not null,margine varchar2(25) not null,fee number(10),repayment varchar2(25)
not null,interest_rate varchar2(25) not null,security varchar2(25) not null)";
    st.execute(sql);
    msgs[count++]="loan_detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table applicant_detail(app_code number(10) primary key,app_name
varchar2(25) not null,age number(3) not null,sex varchar2(25),f_name
varchar2(25),co_so_reg_no number(10),address varchar2(25) not null,phone
number(12),occupation varchar2(25),o_address varchar2(25),o_phone number(12),emp_code
number(10),salary number(10),d_o_j date,d_o_r date)";
    st.execute(sql);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
    msgs[count++]="applicant_detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table nominees_detail(app_code number(10) references
applicant_detail,n_name varchar2(25) not null,age number(3) not null,f_name varchar2(25)
not null,h_address varchar2(25) not null,occupation varchar2(25),organization
varchar2(25),address varchar2(25) not null, phone number(12),salary number(10),relation
varchar2(25))";
    st.execute(sql);
    msgs[count++]="nominees_detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}
try
{
    sql="create table guarantor_detail(index_no number(10),app_code number(10)
references Applicant_Detail,g_name varchar2(25) not null,age number(10) not null,sex
varchar2(10),f_name varchar2(25),h_address varchar2(25),occupation
varchar2(25),organization varchar2(25),address varchar2(25), phone number(12),salary
number(10),relation varchar2(25))";
    st.execute(sql);
    msgs[count++]="Guarantor_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}
try
{
    sql="create table Applicant_Working_Detail(app_code number(10) references
Applicant_Detail,type varchar2(25),firm_name varchar2(25),firm_address
varchar2(25),firm_phone number(10),monthly_income number(10) not null,annual_income
number(10) not null,starting_date date)";
    st.execute(sql);
    msgs[count++]="Applicant_Working_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table Account_Detail(app_code number(10) references
Applicant_Detail,ac_id number(10) primary key,date_o_opening date not null,app_address
varchar2(25) not null,deposit_amount number(10) not null,deposit_date date,credit_amount
number(10) not null,credit_date date not null,balance_amount number(10) not null)";
    st.execute(sql);
    msgs[count++]="Account_Detail table created successfully";
}
catch(Exception ex)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    msgs[count++]=ex.getMessage();  
}  
  
try  
{  
    sql="create table Agreement_Detail(agg_no number(10) primary key,ac_id number(10)  
references Account_Detail);  
    st.execute(sql);  
    msgs[count++]="Agreement_Detail table created successfully";  
}  
catch(Exception ex)  
{  
    msgs[count++]=ex.getMessage();  
}  
try  
{  
    sql="create table Agg_Prop_Detail(ac_id number(10) references  
Account_Detail,prop_name varchar2(25) not null,f_name varchar2(25) not null,organization  
varchar2(25));  
    st.execute(sql);  
    msgs[count++]="Agg_Prop_Detail table created successfully";  
}  
catch(Exception ex)  
{  
    msgs[count++]=ex.getMessage();  
}  
  
try  
{  
    sql="create table Agg_Part_Detail(Type varchar2(3) references Loan_Detail,ac_id  
number(10) references Account_Detail,partner1_name varchar2(25) not null,partner2_name  
varchar2(25),partner3_name varchar2(25),partner4_name varchar2(25),f1_name varchar2(25)  
not null,f2_name varchar2(25),f3_name varchar2(25),f4_name varchar2(25),organization  
varchar2(25));  
    st.execute(sql);  
    msgs[count++]="Agg_Part_Detail table created successfully";  
}  
catch(Exception ex)  
{  
    msgs[count++]=ex.getMessage();  
}  
try  
{  
    sql="create table Agg_Type_Jf_Detail(ac_id number(10) references  
Account_Detail,family_head varchar2(25) not null,f_name varchar2(25),organization  
varchar2(25));  
    st.execute(sql);  
    msgs[count++]="Agg_Type_Jf_Detail table created successfully";  
}  
catch(Exception ex)  
{  
    msgs[count++]=ex.getMessage();  
}  
  
try  
{  
    sql="create table Agg_Type_Rule_Detail(Type varchar2(3) references  
Loan_Detail,agg_no number(10) references Agreement_Detail,loan_amt number(10) not  
null);  
    st.execute(sql);  
    msgs[count++]="Agg_Type_Rule_Detail table created successfully";  
}  
catch(Exception ex)  
{  
    msgs[count++]=ex.getMessage();  
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
null,interest_rate number(10) not null,agg_date date not null,installment_no
number(2),repayment_time number(10),witness_name varchar2(25) not null,app_sign
varchar2(25) not null,officer_name varchar2(25) not null)";
    st.execute(sql);
    msgs[count++]="Agg_Type_Rule_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table Form_Detail(form_id number(10) primary key,app_code number(10)
references Applicant_Detail,ac_id number(10) references Account_Detail)";
    st.execute(sql);
    msgs[count++]="Form_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table Loan_Type_Form_Detail(Type varchar2(3) references
Loan_Detail,form_id number(10) references Form_Detail,ref_no number(10) primary
key,to_info varchar2(25),form_info varchar2(25),date_o_fill date not null,loan_type
varchar2(25) not null,date_o_receipt date not null,cor_sr_no number(10) not
null,bank_address varchar2(25) not null,bank_branch varchar2(25) not null,date_o_recall
date,date_o_bill_transfer date,sanctioned_amt number(10) not null,date_o_first_install
date not null ,date_o_last_install date not null,date_o_per_renewal date not
null,security_disposed varchar2(25) not null,app_sign varchar2(25) not null,officer_sign
varchar2(25) not null,designation varchar2(25) not null)";
    st.execute(sql);
    msgs[count++]="Loan_Type_Form_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table Sanction_Detail(type varchar2(3) references Loan_Detail,app_code
number(10) references Applicant_Detail,ac_id number(10) references Account_Detail,to_info
varchar2(25),form_info varchar2(25),date_o_sanction date,bank_code number(10),bank_branch
varchar2(25),officer_name varchar2(25),designation varchar2(25),total_services
varchar2(25),amount number(10),applicant_income number(10),security
varchar2(25),repayment_prog varchar2(25),remarks varchar2(25),branch_manager
varchar2(25))";
    st.execute(sql);
    msgs[count++]="Sanction_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    sql="create table Repayment_Detail(type varchar2(3) references Loan_Detail,ac_id
number(10)references Account_Detail,app_code number(10) references
Applicant_Detail,key_name_of_borrower varchar2(25),amount_detail number(10),interest_rate
number(10),particular varchar2(25),adjust_date date,debts number(10),credits
number(10),remarks varchar2(25),to_info varchar2(25),form_info
varchar2(25),branch_manager varchar2(25))";
    st.execute(sql);
    msgs[count++]="Repayment_Detail table created successfully";
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    sql="create table Security_Detail(usr_id varchar2(10) ,usr_pwd varchar2(10))";
    st.execute(sql);
    msgs[count++]="Security_Detail table created successfully";
}

catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

try
{
    cn.close();
    st.close();
}
catch(Exception ex)
{
    msgs[count++]=ex.getMessage();
}

lm=new JList(msgs);
lm.setBounds(10,60,680,420);
lm.setBackground(Color.yellow);
lm.setForeground(Color.red);
lm.setFont(new Font("Arial",Font.BOLD,10));
c.add(lm);
lm.setLocation(11,61);
 JOptionPane.showMessageDialog(this,"user & tables created successfully","Database
Result",JOptionPane.INFORMATION_MESSAGE);
}
public static void main(String args[])
{
    cdb1 f;
    f=new cdb1();
    f.show();
}
}
```

\*\*\*\*\*END OF DATABASE CREATION FORM CODING\*\*\*\*\*



### CODING OF UTILITY

```
import java.sql.*;
public class utility
{
    public static Date jdate(String dt)          // 2-8-2008
    {                                             // 31-8-2008
        String sd,sm,sy;                         // 31-12-2008
        int d,m,y;
        try
        {
            if(dt.length()>=8 && dt.length()<=10)
            {
                sd=dt.substring(0,dt.indexOf("-"));   // 2
                dt=dt.substring(dt.indexOf("-")+1);     // 8-2008
                sm=dt.substring(0,dt.indexOf("-"));     // 8
                sy=dt.substring(dt.indexOf("-")+1);     // 2008
                d=Integer.parseInt(sd);
                m=Integer.parseInt(sm);
                y=Integer.parseInt(sy);
                return new Date(y-1900,m-1,d);         // 2008-08-02 00:00:00.000000
            }
        }
        catch(Exception e){}
        return null;
    }
    public static String odate(Date dt)           // 2008-08-02 00:00:00.000000
    {
        String sdt,sd,sm,sy;
        int d,m,y;
        try
        {
            sdt=String.valueOf(dt);
            if(!sdt.equals(""))
            {
                sy=sdt.substring(0,sdt.indexOf("-")); // 2008
                sdt=sdt.substring(sdt.indexOf("-")+1); // 08-02 00:00:00.000000
                sm=sdt.substring(0,sdt.indexOf("-")); // 08
                sd=sdt.substring(sdt.indexOf("-")+1); // 02 00:00:00.000000
                d=Integer.parseInt(sd);             // 2
                m=Integer.parseInt(sm);             // 8
                y=Integer.parseInt(sy);             // 2008
                return new String(d + "-" + m + "-" + y); // "2-8-2008"
            }
        }
        catch(Exception e){}
        return "";
    }
}
```

\*\*\*\*\*END OF CODING OF UTILITY\*\*\*\*\*

### CODING OF ODBC



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
import java.sql.*;
public class odbc
{
    public static Connection connect(String dsn, String uid, String pwd)
    {
        Connection cn=null;
        try
        {
            DriverManager.registerDriver(new sun.jdbc.odbc.JdbcOdbcDriver());
            cn=DriverManager.getConnection("jdbc:odbc:"+dsn,uid,pwd);
        }
        catch(SQLException e){}
        return cn;
    }
}
```

\*\*\*\*\*END OF CODING OF ODBC\*\*\*\*\*

### APPLICANT DETAIL REPORT FORM CODING

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
import java.awt.print.*;
public class rptApplicant_Detail extends JFrame implements ActionListener
{
    Container c;
    PrinterJob pj;
    PageFormat pf;
    PrintPanel cv;

    JPanel pc,ps;
    JLabel lblq1;
    JComboBox cmbq1;
    JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;
    JTable ts;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rc,cc,i,j;
    Object rdt[][],cnm[];
    String sql,rwrt,cond="";
    public rptApplicant_Detail()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE HE BRANCH OF S.B.I.,GUMLA JHARKHAND : Applicant_Detail report");
        setBounds(10,10,780,560);
        c=getContentPane();
        c.setLayout(null);
        pc=new JPanel();
        pc.setLayout(new GridLayout(1,7));
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
pc.setBounds(2,2,776,30);
c.add(pc);

lblq1 = new JLabel("applicant_detail code : ",SwingConstants.RIGHT);
cmbq1 = new JComboBox();
btnshow = new JButton("show");
btnshowall = new JButton("show all");
btnprint = new JButton("print");
btngpgsetup = new JButton("page setup");
btnclose = new JButton("close");

cmbq1.setEditable(false);

btnshow.addActionListener(this);
btnshowall.addActionListener(this);
btnprint.addActionListener(this);
btngpgsetup.addActionListener(this);
btnclose.addActionListener(this);

pc.add(lblq1);
pc.add(cmbq1);
pc.add(btnshow);

pc.add(btnshowall);
pc.add(btnprint);
pc.add(btngpgsetup);
pc.add(btnclose);

connect();
fillcombo();
cv = new PrintPanel();
c.add(cv);

}

void connect()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
}

}

public void fillcombo()
{
try
{
stt = cn.createStatement();
sql="select app_code from applicant_detail" ;
rst = stt.executeQuery(sql);
while(rst.next())
cmbq1.addItem(rst.getString(1));
rst.close();
stt.close();
}
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
void showgriddata(String cond)
{
try
{
    stt=cn.createStatement();
    sql="select * from applicant_detail " + cond;
    rst=stt.executeQuery(sql);
    if(rst.next())
    {

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from applicant_detail" + cond;
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    rm=rs.getMetaData();
    cc=rm.getColumnCount();
    rdt=new Object[rc+1][cc];
    cnm=new Object[cc];
    for(i=0;i<cc;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rc;i++)
    {
        rs.absolute(i+1);
        rs.moveToCurrentRow();
        for(j=0;j<cc;j++)
            rdt[i+1][j]=rs.getObject(j+1);
    }
    if(ps!=null) c.remove(ps);
    ts=new JTable(rdt,cnm);
    ps=new JPanel();
    ps.setBorder(BorderFactory.createTitledBorder("applicant_detail Report"));
    ps.add(new JScrollPane(ts));
    ps.setBounds(2,40,776,500);
    c.add(ps);
    setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "applicant_detail
Report",JOptionPane.WARNING_MESSAGE);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    String ac = e.getActionCommand();
    if(ac.equals("show"))

```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    cond=" where app_code=" + cmbql.getSelectedItem();  
    showgriddata(cond);  
}  
if(ac.equals("show all"))  
{  
    cond="";  
    showgriddata(cond);  
}  
if (ac.equals("print"))  
{  
    pj = PrinterJob.getPrinterJob();  
    if (pf == null)  
        pf = pj.defaultPage();  
    pj.setPrintable(cv, pf);  
    if (pj.printDialog())  
    {  
        try  
        {  
            pj.print();  
        }  
        catch (PrinterException ex)  
        {  
            JOptionPane.showMessageDialog(this, ex,"print  
exception", JOptionPane.ERROR_MESSAGE);  
        }  
    }  
}  
  
if(ac.equals("page setup"))  
{  
    pj = PrinterJob.getPrinterJob();  
    if (pf == null)  
        pf = pj.defaultPage();  
    pf = pj.pageDialog(pf);  
}  
  
if(ac.equals("close"))  
{  
    setVisible(false);  
}  
}  
private class PrintPanel extends JPanel implements Printable  
{  
    public void paintComponent(Graphics g)  
    {  
        super.paintComponent(g);  
    }  
    public int print(Graphics g, PageFormat pf, int page) throws PrinterException  
    {  
        if(page>=1) return Printable.NO_SUCH_PAGE;  
        Graphics2D g2 = (Graphics2D)g;  
        g2.setPaint(Color.black);  
        g2.translate(pf.getImageableX(), pf.getImageableY());  
        g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),  
        pf.getImageableHeight()));  
        int r=2;  
        try  
        {
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
rwdt="";
for(int i=0;i<cc;i++)
    rwdt+=rm.getColumnName(1)+ "   ";
g.drawString(rwdt,10,4);
for(i=0;i<rc;i++)
{
    rs.absolute(i+1);
    rs.moveToCurrentRow();

    rwdt="";
    for(int i=0;i<cc;i++)
        rwdt+=rs.getString(i+1)+ "   ";
    g.drawString(rwdt,10,(++r)*20);
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this, e,"printing
exception",JOptionPane.ERROR_MESSAGE);
}
return Printable.PAGE_EXISTS;
}
public static void main(String args[])
{
    rptApplicant_Detail rpt;
    rpt=new rptApplicant_Detail();
    rpt.show();
}
}
```

\*\*\*\*\***END OF APPLICANT DETAIL REPORT FORM CODING**\*\*\*\*\*

### NOMINEES DETAIL REPORT FORM CODING

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
import java.awt.print.*;
public class rptNominees_Detail extends JFrame implements ActionListener
{
    Container c;
    PrinterJob pj;
    PageFormat pf;
    PrintPanel cv;

    JPanel pc,ps;
    JLabel lblq1;
    JComboBox cmbq1;
    JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;
    JTable ts;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rc,cc,i,j;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
Object rdt[][][],cnm[];
String sql,rwrdt,cond="";
public rptNominees_Detail()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : Nominees_detail report");
    setBounds(10,10,780,560);
    c=getContentPane();
    c.setLayout(null);
    pc=new JPanel();
    pc.setLayout(new GridLayout(1,7));
    pc.setBounds(2,2,776,30);
    c.add(pc);

    lblq1 = new JLabel("Nominees_Detail code : ",SwingConstants.RIGHT);
    cmbq1 = new JComboBox();
    btnshow = new JButton("show");
    btnshowall = new JButton("show all");
    btnprint = new JButton("print");
    btngpgsetup = new JButton("page setup");
    btnclose = new JButton("close");

    cmbq1.setEditable(false);

    btnshow.addActionListener(this);
    btnshowall.addActionListener(this);
    btnprint.addActionListener(this);
    btngpgsetup.addActionListener(this);
    btnclose.addActionListener(this);

    pc.add(lblq1);
    pc.add(cmbq1);
    pc.add(btnshow);
    pc.add(btnshowall);
    pc.add(btnprint);
    pc.add(btngpgsetup);
    pc.add(btnclose);

    connect();
    fillcombo();
    cv = new PrintPanel();
    c.add(cv);

}
void connect()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
    }
}

public void fillcombo()
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
try
{
    stt = cn.createStatement();
    sql="select app_code from nominees_detail" ;
    rst = stt.executeQuery(sql);
    while(rst.next())
        cmbq1.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}
void showgriddata(String cond)
{
try
{
    stt=cn.createStatement();
    sql="select * from nominees_detail " + cond;
    rst=stt.executeQuery(sql);
    if(rst.next())
    {

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from nominees_detail" + cond;
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    rm=rs.getMetaData();
    cc=rm.getColumnCount();
    rdt=new Object[rc+1][cc];
    cnm=new Object[cc];
    for(i=0;i<cc;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rc;i++)
    {
        rs.absolute(i+1);
        rs.moveToCurrentRow();
        for(j=0;j<cc;j++)
            rdt[i+1][j]=rs.getObject(j+1);
    }
    if(ps!=null) c.remove(ps);
    ts=new JTable(rdt,cnm);
    ps=new JPanel();
    ps.setBorder(BorderFactory.createTitledBorder("Nominees_detail Report"));
    ps.add(new JScrollPane(ts));
    ps.setBounds(2,40,776,500);
    c.add(ps);
    setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "Nominees_detail
Report",JOptionPane.WARNING_MESSAGE);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}

public void actionPerformed(ActionEvent e)
{
    String ac = e.getActionCommand();
    if(ac.equals("show"))
    {
        cond=" where app_code=" + cmbq1.getSelectedItem();
        showgriddata(cond);
    }
    if(ac.equals("show all"))
    {
        cond="";
        showgriddata(cond);
    }
    if (ac.equals("print"))
    {
        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pj.setPrintable(cv, pf);
        if (pj.printDialog())
        {
            try
            {
                pj.print();
            }
            catch (PrinterException ex)
            {
                JOptionPane.showMessageDialog(this, ex,"print
exception",JOptionPane.ERROR_MESSAGE);
            }
        }
    }

    if(ac.equals("page setup"))
    {

        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pf = pj.pageDialog(pf);
    }

    if(ac.equals("close"))
    {
        setVisible(false);
    }
}

private class PrintPanel extends JPanel implements Printable
{
    public void paintComponent(Graphics g)
    {
        super.paintComponent(g);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
public int print(Graphics g, PageFormat pf, int page) throws PrinterException
{
    if(page>=1) return Printable.NO_SUCH_PAGE;
    Graphics2D g2 = (Graphics2D)g;
    g2.setPaint(Color.black);
    g2.translate(pf.getImageableX(), pf.getImageableY());
    g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),
    pf.getImageableHeight()));
    int r=2;
    try
    {
        rwdt="";
        for(int i=0;i<cc;i++)
            rwdt+=rm.getColumnName(1)+ " ";
        g.drawString(rwdt,10,4);
        for(i=0;i<rc;i++)
        {
            rs.absolute(i+1);
            rs.moveToCurrentRow();
            rwdt="";
            for(int i=0;i<cc;i++)
                rwdt+=rs.getString(i+1)+" ";
            g.drawString(rwdt,10,(++r)*20);
        }
    }
    catch(Exception e)
    {
        JOptionPane.showMessageDialog(this, e,"printing
exception",JOptionPane.ERROR_MESSAGE);
    }
    return Printable.PAGE_EXISTS;
}
public static void main(String args[])
{
    rptNominees_Detail rpt;
    rpt=new rptNominees_Detail();
    rpt.show();
}
}
```

\*\*\*\*\*END OF NOMINEES DETAIL REPORT FORM CODING\*\*\*\*\*

### ACCOUNT DETAIL REPORT FORM CODING

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
import java.awt.print.*;
public class rptAccount_Detail extends JFrame implements ActionListener
{
    Container c;
    PrinterJob pj;
    PageFormat pf;
    PrintPanel cv;

    JPanel pc,ps;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
JLabel lblq1;
JComboBox cmbq1;
JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;
JTable ts;

Connection cn;
Statement st,stt;
ResultSet rs,rst;
ResultSetMetaData rm;
int rc,cc,i,j;
Object rdt[][] ,cnm[][];
String sql,rwrt,cond="";
public rptAccount_Detail()
{
    setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : account_detail report");
    setBounds(10,10,780,560);
    c=getContentPane();
    c.setLayout(null);
    pc=new JPanel();
    pc.setLayout(new GridLayout(1,7));
    pc.setBounds(2,2,776,30);
    c.add(pc);

    lblq1 = new JLabel("account_detail code : ",SwingConstants.RIGHT);
    cmbq1 = new JComboBox();
    btnshow = new JButton("show");
    btnshowall = new JButton("show all");
    btnprint = new JButton("print");
    btnpgsetup = new JButton("page setup");
    btnclose = new JButton("close");

    cmbq1.setEditable(false);

    btnshow.addActionListener(this);
    btnshowall.addActionListener(this);
    btnprint.addActionListener(this);
    btnpgsetup.addActionListener(this);
    btnclose.addActionListener(this);

    pc.add(lblq1);
    pc.add(cmbq1);
    pc.add(btnshow);
    pc.add(btnshowall);
    pc.add(btnprint);
    pc.add(btnpgsetup);
    pc.add(btnclose);

    connect();
    fillcombo();
    cv = new PrintPanel();
    c.add(cv);

}
void connect()
{
    try
    {
        cn=odbc.connect("mukesh_dsn","mukesh","dream");
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
}

}

public void fillcombo()
{
try
{
    stt = cn.createStatement();
    sql="select app_code from account_detail" ;
    rst = stt.executeQuery(sql);
    while(rst.next())
        cmbq1.addItem(rst.getString(1));
    rst.close();
    stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}

}

void showgriddata(String cond)
{
try
{
    stt=cn.createStatement();
    sql="select * from account_detail " + cond;
    rst=stt.executeQuery(sql);
    if(rst.next())
    {

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from account_detail" + cond;
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    rm=rs.getMetaData();
    cc=rm.getColumnCount();
    rdt=new Object[rc+1][cc];
    cnm=new Object[cc];
    for(i=0;i<cc;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rc;i++)
    {
        rs.absolute(i+1);
        rs.moveToCurrentRow();
        for(j=0;j<cc;j++)
            rdt[i+1][j]=rs.getObject(j+1);
    }
    if(ps!=null) c.remove(ps);
    ts=new JTable(rdt,cnm);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
ps=new JPanel();
ps.setBorder(BorderFactory.createTitledBorder("account_detail Report"));
ps.add(new JScrollPane(ts));
ps.setBounds(2,40,776,500);
c.add(ps);
setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "account_detail
Report", JOptionPane.WARNING_MESSAGE);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" , JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    String ac = e.getActionCommand();
    if(ac.equals("show"))
    {
        cond=" where app_code=" + cmbql.getSelectedItem();
        showgriddata(cond);
    }
    if(ac.equals("show all"))
    {
        cond="";
        showgriddata(cond);
    }
    if (ac.equals("print"))
    {
        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pj.setPrintable(cv, pf);
        if (pj.printDialog())
        {
            try
            {
                pj.print();
            }
            catch (PrinterException ex)
            {
                JOptionPane.showMessageDialog(this, ex,"print
exception", JOptionPane.ERROR_MESSAGE);
            }
        }
    }
    if(ac.equals("page setup"))
    {
        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pf = pj.pageDialog(pf);
    }
    if(ac.equals("close"))
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    setVisible(false);  
}  
}  
private class PrintPanel extends JPanel implements Printable  
{  
    public void paintComponent(Graphics g)  
    {  
        super.paintComponent(g);  
    }  
    public int print(Graphics g, PageFormat pf, int page) throws PrinterException  
    {  
        if(page>=1) return Printable.NO_SUCH_PAGE;  
        Graphics2D g2 = (Graphics2D)g;  
        g2.setPaint(Color.black);  
        g2.translate(pf.getImageableX(), pf.getImageableY());  
        g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),  
pf.getImageableHeight()));  
        int r=2;  
        try  
        {  
            rwdt="";  
            for(int i=0;i<cc;i++)  
                rwdt+=rm.getColumnName(i)+ " ";  
            g.drawString(rwdt,10,4);  
            for(i=0;i<rc;i++)  
            {  
                rs.absolute(i+1);  
                rs.moveToCurrentRow();  
                rwdt="";  
                for(int i=0;i<cc;i++)  
                    rwdt+=rs.getString(i+1)+" ";  
                g.drawString(rwdt,10,(++r)*20);  
            }  
        }  
        catch(Exception e)  
        {  
            JOptionPane.showMessageDialog(this, e,"printing  
exception",JOptionPane.ERROR_MESSAGE);  
        }  
        return Printable.PAGE_EXISTS;  
    }  
}  
public static void main(String args[])  
{  
    rptAccount_Detail rpt;  
    rpt=new rptAccount_Detail();  
    rpt.show();  
}
```

\*\*\*\*\*END OF ACCOUNT DETAIL REPORT FORM CODING\*\*\*\*\*

## FORM DETAIL REPORT FORM CODING

```
import java.awt.*;
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
import java.awt.print.*;
public class rptForm_Detail extends JFrame implements ActionListener
{
    Container c;
    PrinterJob pj;
    PageFormat pf;
    PrintPanel cv;

    JPanel pc,ps;
    JLabel lblq1;
    JComboBox cmbq1;
    JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;
    JTable ts;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rc,cc,i,j;
    Object rdt[][] ,cnm[];
    String sql,rwdt,cond="";
    public rptForm_Detail()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : Form_detail report");
        setBounds(10,10,780,560);
        c=ContentPane();
        c.setLayout(null);
        pc=new JPanel();
        pc.setLayout(new GridLayout(1,7));
        pc.setBounds(2,2,776,30);
        c.add(pc);

        lblq1 = new JLabel("Form_Detail code : ",SwingConstants.RIGHT);
        cmbq1 = new JComboBox();
        btnshow = new JButton("show");
        btnshowall = new JButton("show all");
        btnprint = new JButton("print");
        btnpgsetup = new JButton("page setup");
        btnclose = new JButton("close");

        cmbq1.setEditable(false);

        btnshow.addActionListener(this);
        btnshowall.addActionListener(this);
        btnprint.addActionListener(this);
        btnpgsetup.addActionListener(this);
        btnclose.addActionListener(this);

        pc.add(lblq1);
        pc.add(cmbq1);
        pc.add(btnshow);
        pc.add(btnshowall);
        pc.add(btnprint);
        pc.add(btnpgsetup);
        pc.add(btnclose);
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
connect();
fillcombo();
cv = new PrintPanel();
c.add(cv);

}

void connect()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
}

}

public void fillcombo()
{
try
{
stt = cn.createStatement();
sql="select app_code from Form_detail" ;
rst = stt.executeQuery(sql);
while(rst.next())
cmbq1.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void showgriddata(String cond)
{
try
{
stt=cn.createStatement();
sql="select * from Form_detail " + cond;
rst=stt.executeQuery(sql);
if(rst.next())
{

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
sql="select * from Form_detail" + cond;
rs=st.executeQuery(sql);
rc=0;
while(rs.next()) rc++;
rm=rs.getMetaData();
cc=rm.getColumnCount();
rdt=new Object[rc+1][cc];
cnm=new Object[cc];
for(i=0;i<cc;i++)
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cnm[i]=rm.getColumnName(i+1);
rdt[0][i]=cnm[i];
}
for(i=0;i<rc;i++)
{
    rs.absolute(i+1);
    rs.moveToCurrentRow();
    for(j=0;j<cc;j++)
        rdt[i+1][j]=rs.getObject(j+1);
}
if(ps!=null) c.remove(ps);
ts=new JTable(rdt,cnm);
ps=new JPanel();
ps.setBorder(BorderFactory.createTitledBorder("Form_detail Report"));
ps.add(new JScrollPane(ts));
ps.setBounds(2,40,776,500);
c.add(ps);
setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "Form_detail
Report",JOptionPane.WARNING_MESSAGE);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}
public void actionPerformed(ActionEvent e)
{
    String ac = e.getActionCommand();
    if(ac.equals("show"))
    {
        cond=" where app_code=" + cmbq1.getSelectedItem();
        showgriddata(cond);
    }
    if(ac.equals("show all"))
    {
        cond="";
        showgriddata(cond);
    }
    if (ac.equals("print"))
    {
        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pj.setPrintable(cv, pf);
        if (pj.printDialog())
        {
            try
            {
                pj.print();
            }
            catch (PrinterException ex)
            {
                JOptionPane.showMessageDialog(this, ex,"print
exception",JOptionPane.ERROR_MESSAGE);
            }
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

if(ac.equals("page setup"))
{
    pj = PrinterJob.getPrinterJob();
    if (pf == null)
        pf = pj.defaultPage();
    pf = pj.pageDialog(pf);
}

if(ac.equals("close"))
{
    setVisible(false);
}
}

private class PrintPanel extends JPanel implements Printable
{
    public void paintComponent(Graphics g)
    {
        super.paintComponent(g);
    }
    public int print(Graphics g, PageFormat pf, int page) throws PrinterException
    {
        if(page>=1) return Printable.NO_SUCH_PAGE;
        Graphics2D g2 = (Graphics2D)g;
        g2.setPaint(Color.black);
        g2.translate(pf.getImageableX(), pf.getImageableY());
        g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),
        pf.getImageableHeight())));
        int r=2;
        try
        {
            rwdt="";
            for(int i=0;i<cc;i++)
                rwdt+=rm.getColumnName(i)+ " ";
            g.drawString(rwdt,10,4);
            for(i=0;i<rc;i++)
            {
                rs.absolute(i+1);
                rs.moveToCurrentRow();
                rwdt="";
                for(int i=0;i<cc;i++)
                    rwdt+=rs.getString(i+1)+" ";
                g.drawString(rwdt,10,(++r)*20);
            }
        }
        catch(Exception e)
        {
            JOptionPane.showMessageDialog(this, e,"printing
exception",JOptionPane.ERROR_MESSAGE);
        }
        return Printable.PAGE_EXISTS;
    }
}
public static void main(String args[])
{
    rptForm_Detail rpt;
    rpt=new rptForm_Detail();
    rpt.show();
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}
```

\*\*\*\*\***END OF FORM DETAIL REPORT FORM CODING**\*\*\*\*\*

### SANCTION DETAIL REPORT FORM CODING

```
import java.awt.*;
import java.awt.event.*;
import javax.swing.*;
import java.sql.*;
import java.awt.print.*;
public class rptSanction_Detail extends JFrame implements ActionListener
{
    Container c;
    PrinterJob pj;
    PageFormat pf;
    PrintPanel cv;

    JPanel pc,ps;
    JLabel lblq1;
    JComboBox cmbq1;
    JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;
    JTable ts;

    Connection cn;
    Statement st,stt;
    ResultSet rs,rst;
    ResultSetMetaData rm;
    int rc,cc,i,j;
    Object rdt[][][],cnm[];
    String sql,rwrt,cond="";
    public rptSanction_Detail()
    {
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND : Sanction_Detail report");
        setBounds(10,10,780,560);
        c=getContentPane();
        c.setLayout(null);
        pc=new JPanel();
        pc.setLayout(new GridLayout(1,7));
        pc.setBounds(2,2,776,30);
        c.add(pc);

        lblq1 = new JLabel("rptSanction_Detail code : ",SwingConstants.RIGHT);
        cmbq1 = new JComboBox();
        btnshow = new JButton("show");
        btnshowall = new JButton("show all");
        btnprint = new JButton("print");
        btnpgsetup = new JButton("page setup");
        btnclose = new JButton("close");

        cmbq1.setEditable(false);

        btnshow.addActionListener(this);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
btnshowall.addActionListener(this);
btnprint.addActionListener(this);
btngpgsetup.addActionListener(this);
btnclose.addActionListener(this);

pc.add(lblq1);
pc.add(cmbq1);
pc.add(btnshow);
pc.add(btnshowall);
pc.add(btnprint);
pc.add(btngpgsetup);
pc.add(btnclose);

connect();
fillcombo();
cv = new PrintPanel();
c.add(cv);

}

void connect()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
}

}

public void fillcombo()
{
try
{
stt = cn.createStatement();
sql="select Type from sanction_detail" ;
rst = stt.executeQuery(sql);
while(rst.next())
    cmbq1.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
}

void showgriddata(String cond)
{
try
{
stt=cn.createStatement();
sql="select * from sanction_detail " + cond;
rst=stt.executeQuery(sql);
if(rst.next())
{
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from sanction_detail" + cond;
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    rm=rs.getMetaData();
    cc=rm.getColumnCount();
    rdt=new Object[rc+1][cc];
    cnm=new Object[cc];
    for(i=0;i<cc;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rc;i++)
    {
        rs.absolute(i+1);
        rs.moveToCurrentRow();
        for(j=0;j<cc;j++)
            rdt[i+1][j]=rs.getObject(j+1);
    }
    if(ps!=null) c.remove(ps);
    ts=new JTable(rdt,cnm);
    ps=new JPanel();
    ps.setBorder(BorderFactory.createTitledBorder("sanction_detail Report"));
    ps.add(new JScrollPane(ts));
    ps.setBounds(2,40,776,500);
    c.add(ps);
    setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "sanction_detail
Report", JOptionPane.WARNING_MESSAGE);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" , JOptionPane.ERROR_MESSAGE);
}
public void actionPerformed(ActionEvent e)
{
    String ac = e.getActionCommand();
    if(ac.equals("show"))
    {
        cond=" where Type=" + cmbq1.getSelectedItem();
        showgriddata(cond);
    }
    if(ac.equals("show all"))
    {
        cond="";
        showgriddata(cond);
    }
    if (ac.equals("print"))
    {
        pj = PrinterJob.getPrinterJob();
        if (pf == null)
            pf = pj.defaultPage();
        pj.setPrintable(cv, pf);
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if (pj.printDialog())
{
    try
    {
        pj.print();
    }
    catch (PrinterException ex)
    {
        JOptionPane.showMessageDialog(this, ex,"print
exception",JOptionPane.ERROR_MESSAGE);
    }
}

if(ac.equals("page setup"))
{
    pj = PrinterJob.getPrinterJob();
    if (pf == null)
        pf = pj.defaultPage();
    pf = pj.pageDialog(pf);
}

if(ac.equals("close"))
{
    setVisible(false);
}
}

private class PrintPanel extends JPanel implements Printable
{
    public void paintComponent(Graphics g)
    {
        super.paintComponent(g);
    }
    public int print(Graphics g, PageFormat pf, int page) throws PrinterException
    {
        if(page>=1) return Printable.NO_SUCH_PAGE;
        Graphics2D g2 = (Graphics2D)g;
        g2.setPaint(Color.black);
        g2.translate(pf.getImageableX(), pf.getImageableY());
        g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),
        pf.getImageableHeight()));
        int r=2;
        try
        {
            rwdt="";
            for(int i=0;i<cc;i++)
                rwdt+=rm.getColumnNames(i)+ " ";
            g.drawString(rwdt,10,4);
            for(i=0;i<rc;i++)
            {
                rs.absolute(i+1);
                rs.moveToCurrentRow();
                rwdt="";
                for(int i=0;i<cc;i++)
                    rwdt+=rs.getString(i+1)+ " ";
                g.drawString(rwdt,10,(++r)*20);
            }
        }
        catch(Exception e)
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
{  
    JOptionPane.showMessageDialog(this, e,"printing  
exception",JOptionPane.ERROR_MESSAGE);  
}  
return Printable.PAGE_EXISTS;  
}  
}  
public static void main(String args[])  
{  
    rptSanction_Detail rpt;  
    rpt=new rptSanction_Detail();  
    rpt.show();  
}  
}  
}
```

\*\*\*\*\*END OF SANCTION DETAIL FORM CODING\*\*\*\*\*

### REPAYMENT DETAIL REPORT FORM CODING

```
import java.awt.*;  
import java.awt.event.*;  
import javax.swing.*;  
import java.sql.*;  
import java.awt.print.*;  
public class rptRepayment_Detail extends JFrame implements ActionListener  
{  
    Container c;  
    PrinterJob pj;  
    PageFormat pf;  
    PrintPanel cv;  
  
    JPanel pc,ps;  
    JLabel lblq1;  
    JComboBox cmbq1;  
    JButton btnshow,btnshowall,btnprint,btnpgsetup,btnclose;  
    JTable ts;  
  
    Connection cn;  
    Statement st,stt;  
    ResultSet rs,rst;  
    ResultSetMetaData rm;  
    int rc,cc,i,j;  
    Object rdt[][] ,cnm[];  
    String sql,rwrdt,cond="";  
    public rptRepayment_Detail()  
    {  
        setTitle("SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH OF S.B.I.,GUMLA JHARKHAND :  
repayment_Detail report");  
        setBounds(10,10,780,560);  
        c=getContentPane();  
        c.setLayout(null);  
        pc=new JPanel();  
        pc.setLayout(new GridLayout(1,7));  
        pc.setBounds(2,2,776,30);  
        c.add(pc);  
  
        lblq1 = new JLabel("rptrepayment_Detail code : ",SwingConstants.RIGHT);  
    }
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
cmbq1 = new JComboBox();
btnshow = new JButton("show");
btnshowall = new JButton("show all");
btnprint = new JButton("print");
btngpgsetup = new JButton("page setup");
btnclose = new JButton("close");

cmbq1.setEditable(false);

btnshow.addActionListener(this);
btnshowall.addActionListener(this);
btnprint.addActionListener(this);
btngpgsetup.addActionListener(this);
btnclose.addActionListener(this);

pc.add(lblq1);
pc.add(cmbq1);
pc.add(btnshow);

pc.add(btnshowall);
pc.add(btnprint);
pc.add(btngpgsetup);
pc.add(btnclose);

connect();
fillcombo();
cv = new PrintPanel();
c.add(cv);

}

void connect()
{
try
{
cn=odbc.connect("mukesh_dsn","mukesh","dream");
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"connect exception"
,JOptionPane.ERROR_MESSAGE);
}

}

public void fillcombo()
{
try
{
stt = cn.createStatement();
sql="select Type from loan_detail" ;
rst = stt.executeQuery(sql);
while(rst.next())
    cmbq1.addItem(rst.getString(1));
rst.close();
stt.close();
}
catch(Exception e)
{
 JOptionPane.showMessageDialog(this,e,"fillcombo exception"
,JOptionPane.ERROR_MESSAGE);
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
}

void showgriddata(String cond)
{
try
{
    stt=cn.createStatement();
    sql="select * from repayment_detail " + cond;
    rst=stt.executeQuery(sql);
    if(rst.next())
    {

st=cn.createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,ResultSet.CONCUR_READ_ONLY);
    sql="select * from repayment_detail" + cond;
    rs=st.executeQuery(sql);
    rc=0;
    while(rs.next()) rc++;
    rm=rs.getMetaData();
    cc=rm.getColumnCount();
    rdt=new Object[rc+1][cc];
    cnm=new Object[cc];
    for(i=0;i<cc;i++)
    {
        cnm[i]=rm.getColumnName(i+1);
        rdt[0][i]=cnm[i];
    }
    for(i=0;i<rc;i++)
    {
        rs.absolute(i+1);
        rs.moveToCurrentRow();
        for(j=0;j<cc;j++)
            rdt[i+1][j]=rs.getObject(j+1);
    }
    if(ps!=null) c.remove(ps);
    ts=new JTable(rdt,cnm);
    ps=new JPanel();
    ps.setBorder(BorderFactory.createTitledBorder("repayment_detail Report"));
    ps.add(new JScrollPane(ts));
    ps.setBounds(2,40,776,500);
    c.add(ps);
    setVisible(true);
}
else
    JOptionPane.showMessageDialog(null,"data not Found.", "repayment_detail
Report",JOptionPane.WARNING_MESSAGE);
}
catch(Exception ex)
{
    JOptionPane.showMessageDialog(this,ex,"show exception" ,JOptionPane.ERROR_MESSAGE);
}
}

public void actionPerformed(ActionEvent e)
{
String ac = e.getActionCommand();
if(ac.equals("show"))
{
    cond=" where Type=" + cmbq1.getSelectedItem();
    showgriddata(cond);
}
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
if(ac.equals("show all"))
{
    cond="";
    showgriddata(cond);
}
if (ac.equals("print"))
{
    pj = PrinterJob.getPrinterJob();
    if (pf == null)
        pf = pj.defaultPage();
    pj.setPrintable(cv, pf);
    if (pj.printDialog())
    {
        try
        {
            pj.print();
        }
        catch (PrinterException ex)
        {
            JOptionPane.showMessageDialog(this, ex,"print
exception",JOptionPane.ERROR_MESSAGE);
        }
    }
}

if(ac.equals("page setup"))
{
    pj = PrinterJob.getPrinterJob();
    if (pf == null)
        pf = pj.defaultPage();
    pf = pj.pageDialog(pf);
}

if(ac.equals("close"))
{
    setVisible(false);
}
}
private class PrintPanel extends JPanel implements Printable
{
    public void paintComponent(Graphics g)
    {
        super.paintComponent(g);
    }
    public int print(Graphics g, PageFormat pf, int page) throws PrinterException
    {
        if(page>=1) return Printable.NO_SUCH_PAGE;
        Graphics2D g2 = (Graphics2D)g;
        g2.setPaint(Color.black);
        g2.translate(pf.getImageableX(), pf.getImageableY());
        g2.draw(new java.awt.geom.Rectangle2D.Double(0, 0,pf.getImageableWidth(),
        pf.getImageableHeight()));
        int r=2;
        try
        {
            rwdt="";
            for(int i=0;i<cc;i++)
                rwdt+=rm.getColumnNames(i)+ " ";
            g.drawString(rwdt,10,4);
        }
    }
}
```



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

```
for(i=0;i<rc;i++)
{
    rs.absolute(i+1);
    rs.moveToCurrentRow();
    rwdt="";
    for(int i=0;i<cc;i++)
        rwdt+=rs.getString(i+1)+ " ";
    g.drawString(rwdt,10,(++r)*20);
}
}
catch(Exception e)
{
    JOptionPane.showMessageDialog(this, e,"printing
exception",JOptionPane.ERROR_MESSAGE);
}
return Printable.PAGE_EXISTS;
}
}
public static void main(String args[])
{
    rptRepayment_Detail rpt;
    rpt=new rptRepayment_Detail();
    rpt.show();
}
}
```

\*\*\*\*\*END OF REPAYMENT DETAIL REPORT FORM CODING\*\*\*\*\*

\*\*\*\*\*



SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

# END OF CODING



## ***SECURITY MEASURES***

There are several aspects of the system security: -

1) **Hardware Security:** -

Only limited and authenticated person will be allowed to access the system. The system administrator will take care of all these things.

2) **Software Security:** -

Two levels of software security can be provided: the operating system level and the database level. Each user will be assigned a unique user ID and a confidential password to log into the system. The proposed system adopts the Windows XP operating system, which is highly secure and prevents unauthorized users from accessing the system.

Additionally, it restricts user functions by granting proper access control mechanisms. Similarly, the Oracle database server provides an extra layer of security to ensure that unauthorized users cannot access the database. Authorized users can only access the parts of the database for which they have been granted specific access privileges.

3) **Application Level Security:** -

User authentication and validation have also been defined additionally in the application level. The users have been provided user name and password for



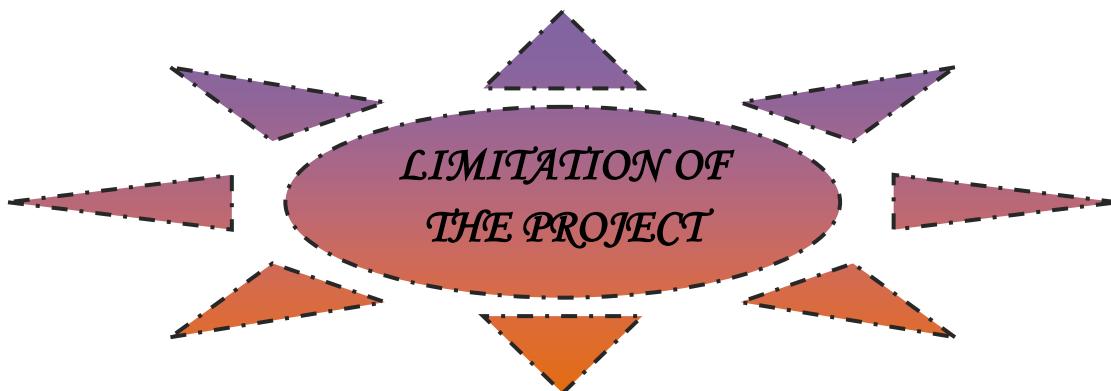
## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

access. They are categorized into different roles: administrator, officer, assistant, and operator. The role of each type of user has been defined and fixed and user can't violate these security rules.

### 4) **Data Level Security:** -

Data validation rules and constraints are properly defined at both the database and application levels, ensuring that only valid data can be entered. Additionally, background audit mechanisms are in place to track all activities related to data management.

For example, data insertions are recorded along with the username and the date and time of the insertion. Similarly, data updates and deletions are also logged with the username and the date and time of the action. A separate copy of the original data is stored in an audit table during updates and deletions, along with the recording of the user performing the action and the date and time. This audit table allows the original data to be restored when needed, and the user responsible can be identified. The application also tracks all user activities, ensuring that the data itself is fully secured.



The project GCRPL is dedicated for a good management. However, we tried our LEVEL best to full-fulfill the requirement of users of this project, but this project too has few limitations: -

- A) This is used for Client-server network. It cannot be used on Internet (web application).
- B) All facilities in this system depend on key-attribute, missing of key - attribute may cause loss of data.
- C) There is no facility to recover the data.



## FUTURE APPLICATION OF THE PROJECT & CONCLUSION

The following are the future prospects of this application:

The development of this software has been done with the future scope in mind. I believe it has strong potential for further growth. This software addresses many of the operational challenges faced by the State Bank of India. Once developed, it will streamline the entire loan processing workflow, making it easier to manage. Keeping in mind the needs of the organization, future implementations can be carried out smoothly when required. Currently, I am developing this software specifically for the loan development process at the State Bank of India, but this project is being carried out nationwide. If successful, it can also be distributed to other organizations. The flexibility and the wide range of reports that this software will provide significantly enhance its future scope.

While the project has bright prospects, it still has certain limitations that cannot be overlooked. Currently, the software restricts activities to the State Bank of India. Ideally, it should support all circles and regions with the assistance of the bank. If this application were linked with servers and accessible from any location, its scope would be significantly enhanced.

1. Since this is government-purpose management software, new related sections or topics can be added in the future. Therefore, its scope is enhanced, as it can handle any kind of subject matter in the future. The loan management system at the SBI Branch in Gumla



## SYSTEM FOR LOAN MANAGEMENT FOR THE BRANCH GUMLA (JHARKHAND)

(Jharkhand), Ranchi, is fully computerized, meaning that all records are available in less time, and most of the major tasks are paperless.

2. All programs will be written in Microsoft Visual Basic, and all databases will be stored in Oracle. This ensures that any experienced programmer can modify the software if needed.
3. Slight modifications to the program can affect its functionality. Therefore, authorized personnel in management should oversee any changes to the program.
4. Different kinds of tests can be designed and incorporated into the testing program to ensure the software works as expected.
5. Most modules are independent of each other, so modifications in one module will not affect the others.

In the context of the Indian scenario, software using Visual Basic as the front-end and Oracle as the back-end tool has a bright future, especially in the field of software development.



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