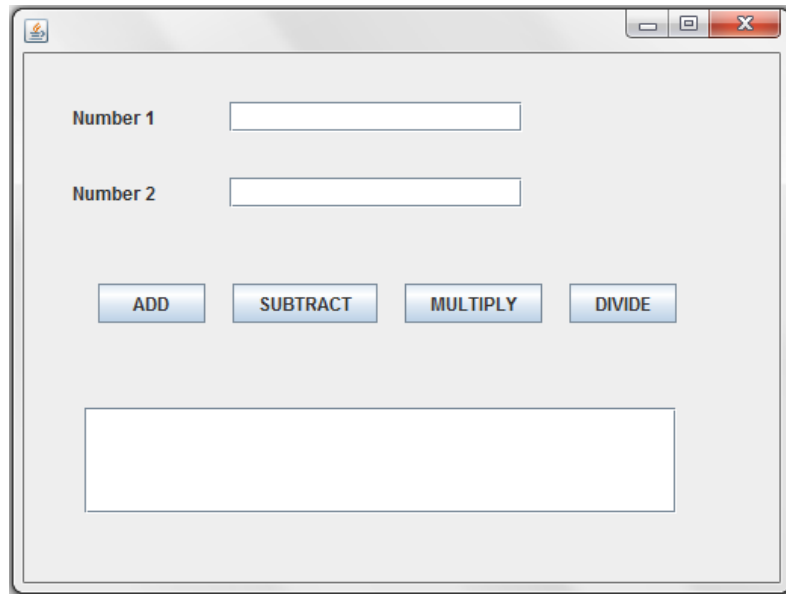


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PRACTICAL 1

Design a GUI as per the design given below and write the correct code in Java to perform the addition, subtraction, multiplication and division of two numbers.

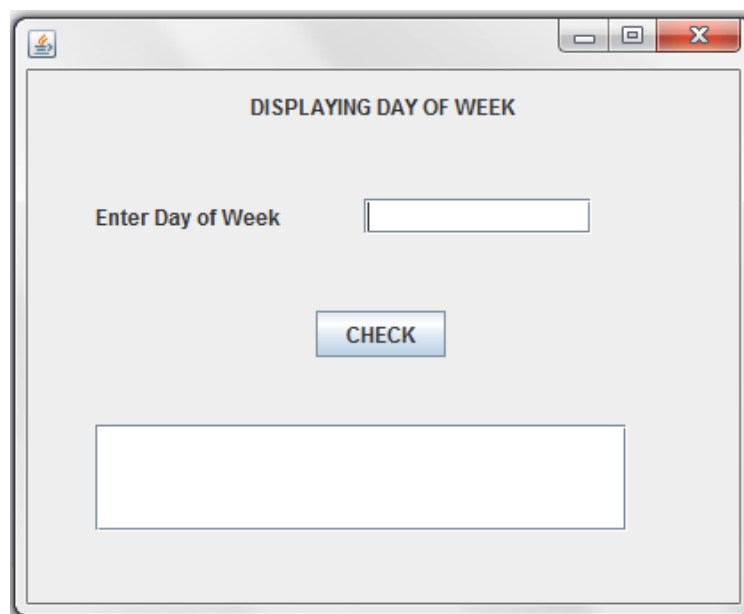


The screenshot shows a Java Swing window with a light gray background. At the top left is a small icon, and at the top right are standard window control buttons (minimize, maximize, close). The main content area contains the following elements:

- The text "Number 1" followed by a text input field.
- The text "Number 2" followed by another text input field.
- Four buttons labeled "ADD", "SUBTRACT", "MULTIPLY", and "DIVIDE" arranged horizontally.
- A large, empty rectangular text area at the bottom of the window.

PRACTICAL 2

Write code in Java to translate to its equivalent name of the day of the week.(e.g. 1 to Sunday, 2 to Monday, 7 to Saturday).



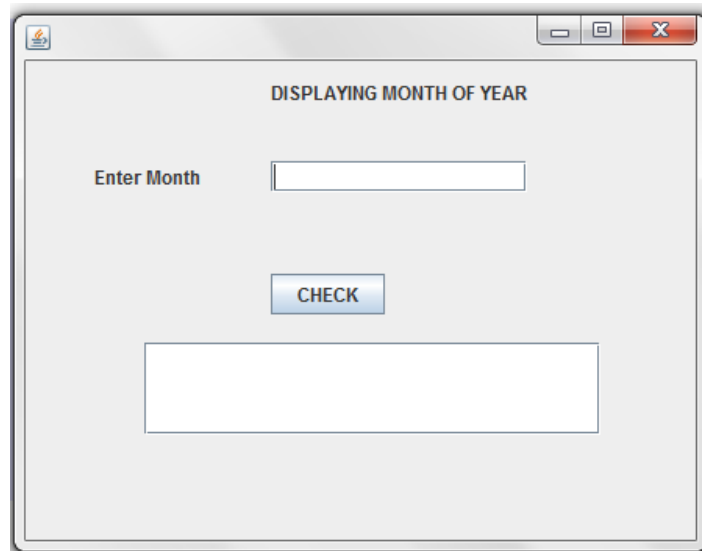
The screenshot shows a Java Swing window titled "DISPLAYING DAY OF WEEK". The window has a light gray background and standard window control buttons at the top right. The main content area contains the following elements:

- The text "Enter Day of Week" followed by a text input field.
- A button labeled "CHECK" centered below the input field.
- A large, empty rectangular text area at the bottom of the window.

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PRACTICAL 3

Write code in Java to translate to its equivalent name of the month of the year.(e.g. 1 to January, 2 to February, 12 to December.



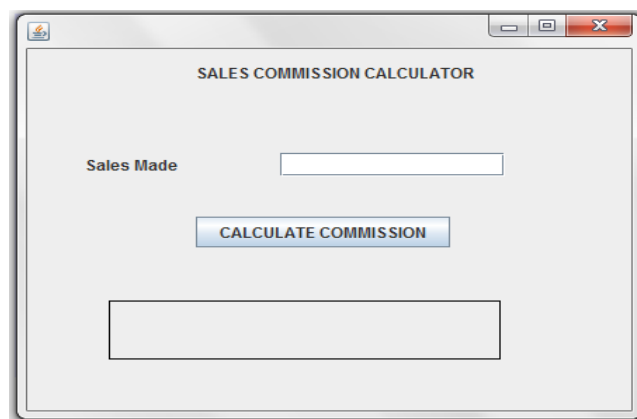
The screenshot shows a Java Swing window with the title "DISPLAYING MONTH OF YEAR". Inside the window, there is a label "Enter Month" followed by a text input field. Below the input field is a button labeled "CHECK". At the bottom of the window is a large, empty rectangular text area intended for the program's output.

PRACTICAL 4

Calculate commission for the salesman. The commission is calculated according to following rates:

Sales	Commission Rate
30001 onwards	15%
22001 – 30000	10%
12001 – 22000	7%
5001 – 12000	3%
0-5000	0%

The program accepts the sales made by the salesman and displays the calculated commission.



The screenshot shows a Java Swing window with the title "SALES COMMISSION CALCULATOR". Inside the window, there is a label "Sales Made" followed by a text input field. Below the input field is a button labeled "CALCULATE COMMISSION". At the bottom of the window is a large, empty rectangular text area intended for the program's output.

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PRACTICAL 5

Design a GUI application having interface as shown below. The percentage marks are to be entered in the text box and upon clicking at the button, corresponding grade (as per following rules) should be displayed in the Label.

Marks%	Grade
>=90	A++
80-90	A+
75-80	A
60-75	B
50-60	C
40-50	D
<40	Fail

The screenshot shows a window titled "GRADE CALCULATOR". Inside the window, there is a label "Enter your marks%" followed by a text input field. Below this is a button labeled "CALCULATE FINAL GRADE". At the bottom of the window is a large, empty rectangular box intended for displaying the calculated grade.

PRACTICAL 6

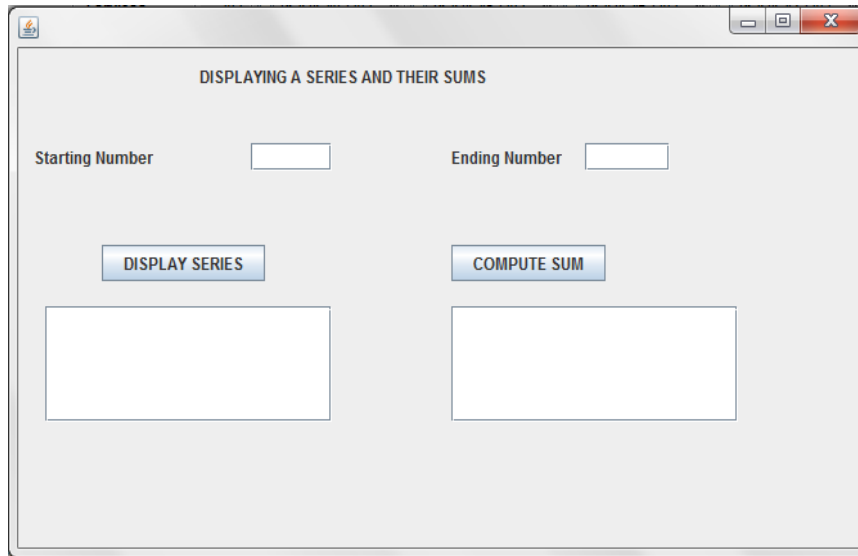
Design the given GUI in NetBeans and write the code in java to find the larger of two numbers.

The screenshot shows a window titled "LARGEST NUMBER". Inside the window, there are two labels, "Number 1" and "Number 2", each followed by a text input field. Below these is a button labeled "CHECK". At the bottom of the window is a large, empty rectangular box intended for displaying the result of comparing the two numbers.

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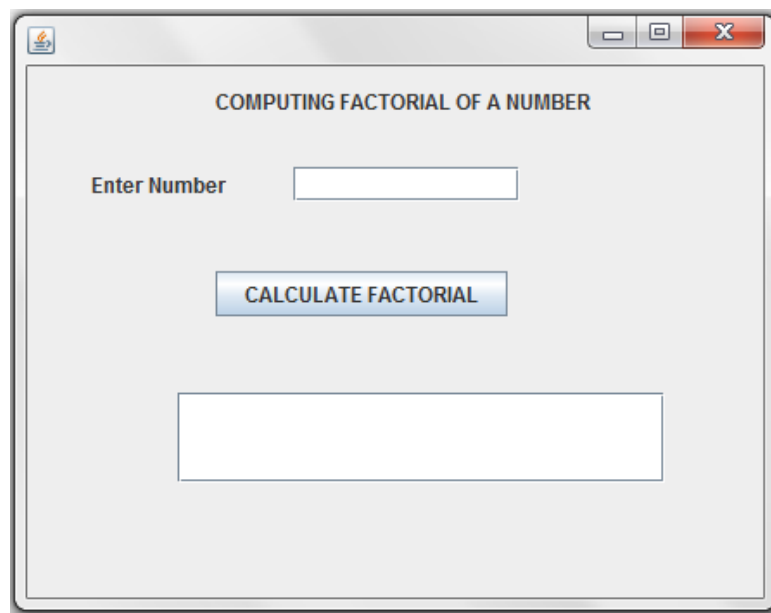
PRACTICAL 7

Design the given GUI in NetBeans and put the starting and end numbers in both textfields. Then on click of 'DISPLAY SERIES' button display the series in TextArea and on click of 'COMPUTE SUM' button , display the sum of the series in TextArea.



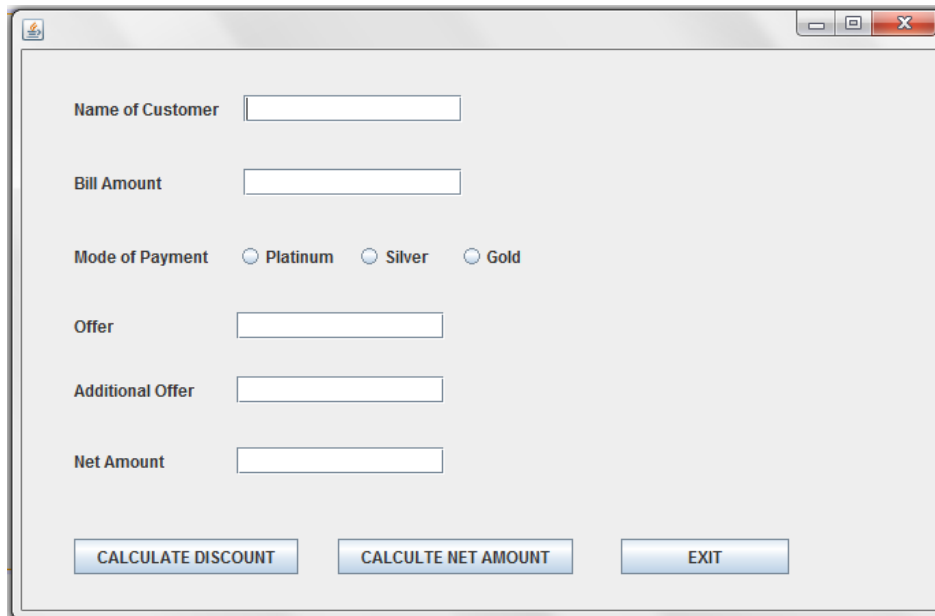
PRACTICAL 8

Calculate the Factorial of a given number as per the given GUI.



PRACTICAL 9

Mr. Ram Kishore, the owner of the Kiddi Land Enterprises has asked his programmer Saumya to develop the following GUI in NetBeans:



Mr. Ram accepts payment through three types of credit cards. The offer is given according to the following scheme:

Type of Card	Offer
Platinum	20% of amount
Gold	15% of amount
Silver	10% of amount

If the bill amount is more than Rs. 25000/- then the customer gets an additional offer of 5%. Write Java code for the following:

- To assign Additional Offer as 0 (jTextField4) and Net amount as 0 (jTextField5). Also set them as un-editable.
- [When "Calculate offer" (jButton1) is clicked]
To Calculate discount as per the given criteria and display the same in jTextField3.
To assign Additional offer (jTextField4) as 5% of amount (jTextField2) as per the above condition.
To enable "Calculate Net Amount" (jButton2) button.
- [When "Calculate Net Amount " (jButton 2) button is clicked]
To calculate net amount as
[TotalCost (jTextField2) – offer (jTextField3) – Additionaloffer (jTextField4)]
To display the net amount in jTextField5.

PRACTICAL 10

XYZ Pens Company sells each pen at the cost of Rs. 25. The Programmer has developed a GUI application as shown below:

The screenshot shows a Java Swing window titled "XYZ Pens Co." with a standard Windows-style title bar. Inside the window, the text "XYZ Pens Co." is displayed at the top. Below it, there are two text input fields: "Enter Name" and "Enter No. of Pens". To the right of the "Enter No. of Pens" field is a checkbox labeled "SPECIAL CUSTOMER". Below these fields are three buttons: "CALCULATE", "STOP", and "CLEAR". At the bottom of the window, there are three more text input fields: "Amount", "Discount", and "Amount to be Paid".

- The number of pens bought are entered by the user.
- The Amount is Number of Pens * 25.
- If a person buying pens is a 'Special Customer' a discount of 5% is given on the amount, otherwise no discount is given.
- Amount to be paid = Amount – Discount

Write code in Java to do the following:

- (i) When Calculate button is clicked the Amount, Discount and Amount to be paid are calculated and should be displayed in appropriate text fields.
- (ii) When Clear button is clicked, all the TextFields and Checkbox are cleared.
- (iii) When Stop button is clicked, the application is closed.

(you can assume any suitable names for various controls on the form.)

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PRACTICAL 11

Richika is a programmer at Alpha Builders. To calculate wages to be paid to labourers she has developed the following GUI in Netbeans.

The screenshot shows a Java Swing window with a light gray background. It contains the following components:

- A text field labeled "Name".
- A "Gender" section with two radio buttons: "Male" and "Female".
- A checkbox labeled "Skilled".
- A text field labeled "No. Of Days Worked".
- A button labeled "Calculate Wages".
- A text field labeled "Total Wages".
- Two buttons at the bottom: "Clear" and "Stop".

Male and Female labourers are respectively paid at the rate of Rs. 140/- per day and Rs, 160/- per day. Skilled labourers are paid extra at the rate of Rs. 50/- per day.

- (i) What should be done so that only one radio buttons (Male and Female) can be selected at a time?
- (ii) Write code to do the following:
 - (a) Calculate and display the Total wages in the corresponding label when the "Calculate Wages" button is pressed.
 - (b) Clear the Name and No. of days worked text fields.
 - (c) Close the application when the "STOP" button is pressed.

(you can assume any suitable names for various controls on the form.)

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PRACTICAL 12

Manager of Modern Electronics has developed a form for finding out Total amount to be paid by customers. The 3 payment mode has been given. If a customer buys an item in Cash, 10% discount is given, if payment mode is Credit Card, 5% discount is given otherwise no discount is given to customers. If customers wants home delivery, extra charge to be paid as follows:

Distance	Home Delivery Charge
0 – 5 Km.	Rs. 200
6 – 10 Km	Rs. 500
11 Km and above	Rs. 800

Object Type	Object Name	Description
Form	FrmMElectronics	Main Form
Combo Box	cmbProduct	To select product purchased
	cmbCompany	To select company of product
TextField	txtQuantity	To enter Quantity
	txtPrice	To enter price
	txtTotalPayable	To display total payable amount
	txtDistance	To enter distance for home delivery
Option Button	optCash	To select payment mode for cash
	optCreditCard	To select payment mode for Credit Card
	optDebitCard	To select payment mode for Debit card
Check Box	chkHomeDeliv	To select for home delivery
Command Button	cmdCalcAmt	To calculate payable amount
	cmdClear	To clear the entered values
	cmdExit	To quit from application

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The screenshot shows a Java Swing application window with the following components:

- Select Product:** A dropdown menu with "LCD" selected.
- Select Company:** A dropdown menu with "SONY" selected.
- Enter Quantity:** A text input field.
- Enter Price:** A text input field.
- Total Payable Amount:** A text input field.
- Select Payment Mode:** Three radio buttons: "Cash" (selected), "Credit Card", and "Debit Card".
- Home Delivery:** A checkbox labeled "Home Delivery" which is currently unchecked.
- Buttons:** Three buttons at the bottom: "Total Amount", "Clear", and "Exit".

- (i) Initially payment mode should be set to Cash, TxtTotalPayable should be disabled and txtDistance should be invisible.
- (ii) If user selects Home delivery check box, txtDistance should be made available (below the home delivey check box) to enter distance for home delivery.
- (iii) When the user clicks the CmdCalcAmt button, the total payable amount should be calculated and displayed in the txtTotalPayable text box.
- (iv) Write the code for CmdExit button to stop the application.

PRACTICAL 13

Ms. Rakhi works in an international Bank as an IT Head. She designed a simple interest calculator program as shown below:

INTERNATIONAL BANK

CUSTOMER NAME

DEPOSIT AMOUNT

ACCOUNT TYPE SAVING RECURRING DEPOSIT FIXED DEPOSIT

INTEREST RATE

DEPOSIT DURATION(IN YEARS)

SIMPLE INTEREST AMOUNT

The interest rate is given based on the account type as shown below:

ACCOUNT TYPE	INTEREST RATE %
SAVING	4%
RECURRING DEPOSIT	6%
FIXED DEPOSIT	8%

- (i) Write the code required for 'INTEREST RATE' button to display interest rate as per the above given criteria.
- (ii) Write the code required for 'SI' button to calculate and display 'Simple Interest' based on the given formulae:
$$SI = (\text{amount} * \text{interest_rate} * \text{duration}) / 100;$$
- (iii) Write the code required for 'CLEAR ALL' to clear all the textfields.

(you can assume any suitable names for various controls on the form.)