



INDIAN SCHOOL AL WADI AL KABIR

Class: IX

DEPARTMENT OF COMPUTER SCIENCE

Topic: Introduction to JAVA programming: Getting Started with IDE

Question Bank - 1

Fill in the blanks:

1. A frame is a window that typically has decorations such as a border, at title, and buttons for closing and iconifying itself.
2. A Menu Bar is displayed directly below the title bar and includes a lot of options. Each option on it has a drop-down list of items that help you to perform various tasks.
3. Title Bar defines the title of the application.
4. A Palette is used to display things like labels, text fields, button and other controls.
5. The core program or text which is written in a language like C, C++ or Java is called Source Program.
6. A Java Bytecode is machine instruction that the Java compiler generates and Java interpreter executes.
7. RAD stands for Rapid Application Development.

Answer the following:

- 1 What is the use of controls?
Controls are component objects such as text fields, labels, list boxes etc., that are drawn on the frame to get data input or to display output.
- 2 What is ordinary compilation process?
The program or code written by a programmer is usually called the source code. This source code needs to be converted into machine language code, which a computer can easily understand. The process of converting a source code into a machine code is called compilation.
- 3 Name any 4 controls in a palette.
JTextField, JButton, JTextArea, JLabel.
- 4 What is the process of compiling a Java program?
Java programs first compiled into byte code and then translates it into the native language of the host machine on the fly. Since the byte code is completely platform independent, only the interpreter and a few native libraries need to be ported to get java to run on a new computer or operating system.
- 5 Write the characteristics of Java.
 - Write Once Run Anywhere
 - Light weight code.
 - Security
 - Built – In – Graphics
 - Object Oriented Language
 - Supports Multimedia
 - Platform Independent
 - Open Product

6 What are the features of Net Beans Java Net Beans?

- Drag-and-Drop GUI Creation
- excellent editing
- Web Services
- excellent debugging
- Wizards, code generation and management tools and many more.

7 What do you mean by properties window?

Properties window displays the editable settings for the currently selected component.

8 What is a Tool Bar?

A tool bar is a bar that displays icons for commonly used tasks. It has tool buttons like, New File, New Project, Save All, Open Project, Undo, Redo, Build Main Project, Quick Search etc.,

9 What do you mean by GUI builder?

It is also called Design Area or Design Space. It where GUI is constructed. It has two views source view and Design view. In Design view we can view all the controls of our GUI and it is default view and in source view, we can see the code editor of our application.

10 Define: Java Byte Code.

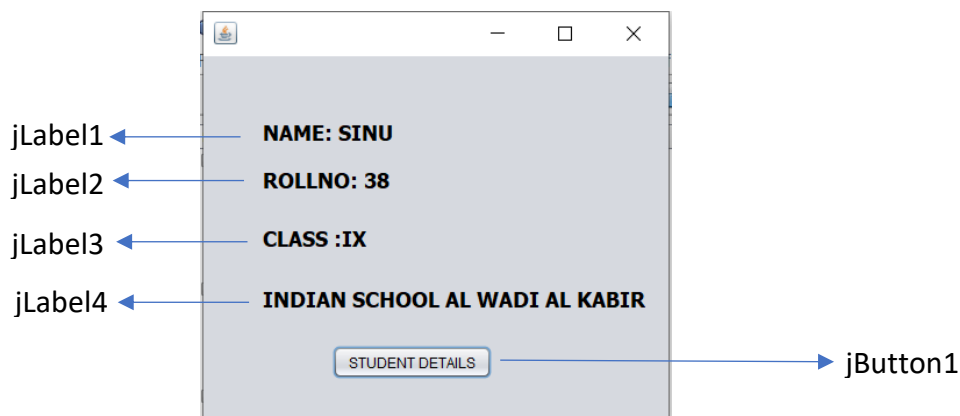
The Java Byte code is a machine instruction for a Java processor chip called Java Virtual Machine (JVM). The byte code is independent of the computer system it has to run upon.

11 What is the use of Inspector Window?

It displays a tree hierarchy of all components contained in the currently opened form like buttons, labels, menus, panels, timers and etc.,

Programs:

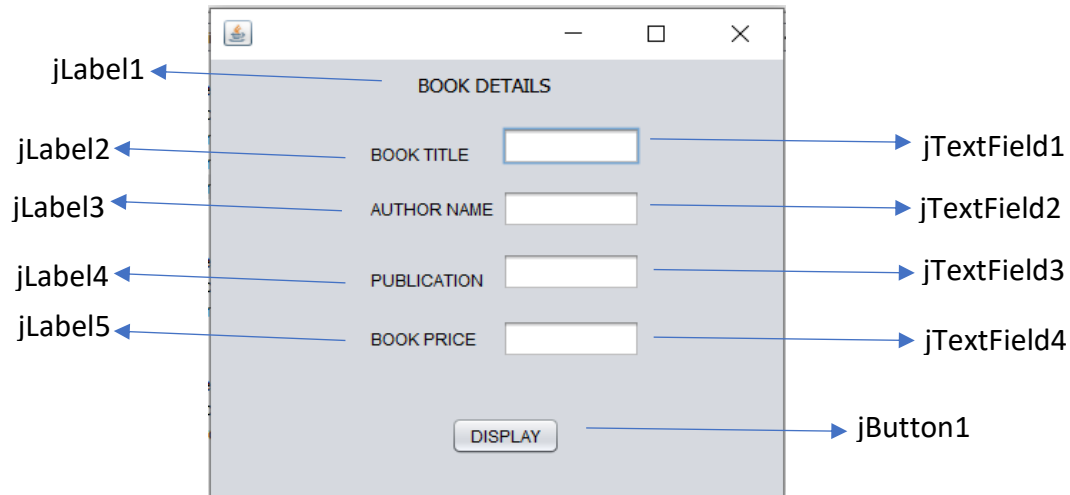
1. Design Java Frame to display the details of a students (Roll Number, Name, Class, School Name) in separate Labels when the user is clicking on Student Details button.



CODE FOR STUDENT DETAILS BUTTON:

```
jLabel1.setText("NAME: SINU");  
jLabel2.setText("ROLLNO: 38");  
jLabel3.setText("CLASS: IX");  
jLabel4.setText("INDIAN SCHOOL AL WADI AL KABIR");
```

2. Design Java Frame to display the details of a book (Book Title, Author Name, Publication, Book Price) in separate Text Fields when the user is clicking on Display button



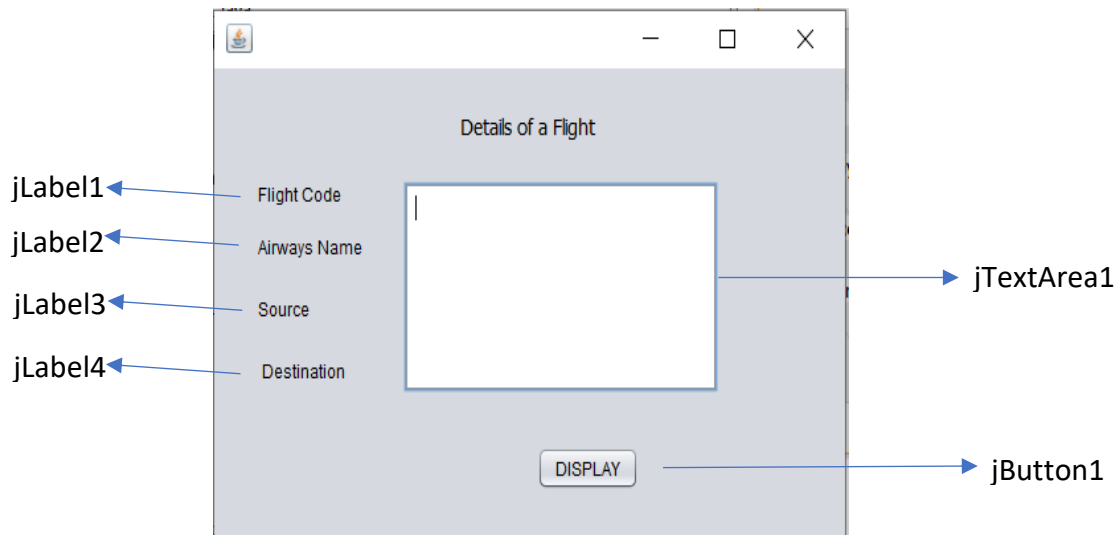
CODE FOR DISPLAY BUTTON

```

jTextField1.setText("The Alchemist");
jTextField2.setText("Paulo Coelho");
jTextField3.setText("Harper Torch");
jTextField4.setText("OMR 10");

```

3. Design Java Frame to display the details of a Flight (Flight Code, Airways Name, Source, Destination) in a Text Area when the user is clicking on ShowFlight Details button



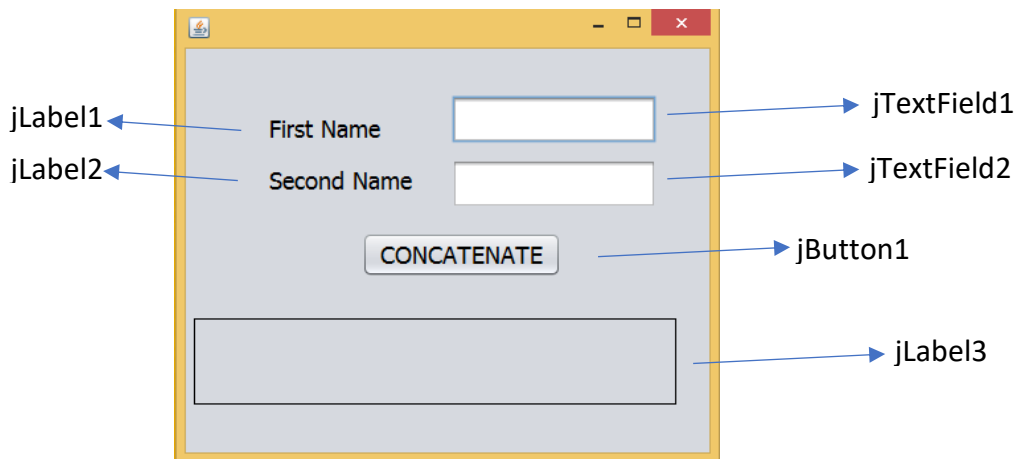
CODE FOR DISPLAY BUTTON

```

jTextArea1.append("7885"+"\\n");
jTextArea1.append("OmanAir"+"\\n");
jTextArea1.append("Muscat"+"\\n");
jTextArea1.append("Cochin"+"\\n");

```

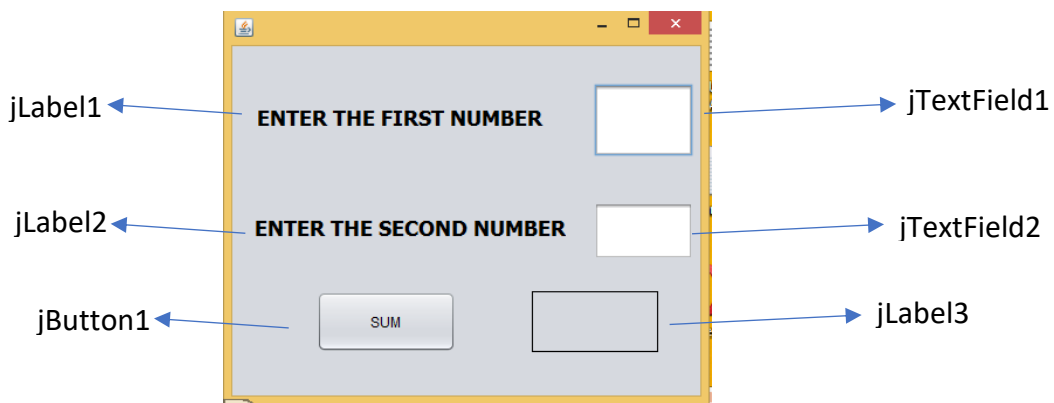
4. Design Java Frame to accept First Name and Last Name of the Student merge the details of two Text Fields into another JLabel when the user is clicking on CONCATENATE button.



CODE FOR CONCATENATE:

```
String t1=jTextField1.getText();  
String t2=jTextField2.getText();  
jLabel3.setText(""+t1+t2);
```

5. Design Java Frame to accept two numbers entered in two text fields in resulttext field when the user click on SUM button.



CODE FOR SUM BUTTON:

```
String txt1 =jTextField1.getText();  
int n1=Integer.parseInt(txt1);  
String txt2= jTextField2.getText();  
int n2=Integer.parseInt(txt2);  
int sum=n1+n2;  
jLabel3.setText(""+sum);
```