

OOP LAB 9

NetBeans GUI with Class Templates

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Exercise 1:

Create a GUI based application system that calculates the newton's second law of motion i.e., $F=ma$ where,

F=Force in Newton

m= mass in grams

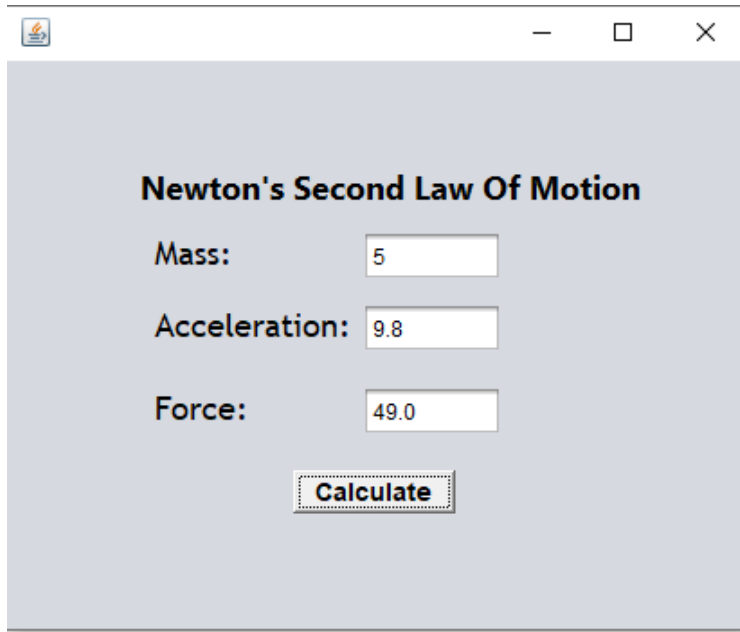
a= acceleration ($a=9.8\text{m/s}^2$ for free falling bodies)

use proper alignment and design suitable to the application being created.

SOURCE CODE:

```
private void calculateActionPerformed(java.awt.event.ActionEvent evt) {  
    // TODO add your handling code here:  
  
    int mass = Integer.parseInt(Mass.getText());  
  
    double acc = Double.parseDouble(Acceleration.getText());  
  
    double r = mass * acc;  
  
    Force.setText(String.valueOf(r));  
  
}
```

OUTPUT:



Newton's Second Law Of Motion

Mass:

Acceleration:

Force:

Exercise 2:

Create a login system interface based on your own choice of environment for example, cafeteria, cyber security site or etc. Make sure you have your own unique scenario and apply proper designing chose appropriate color palette and images. System must have proper labels, text boxes, buttons, and other necessary controls.

SOURCE CODE IN CLASS:

```
package lab9;
```

```
public class LAB9 {
```

```
    String name,password;
```

```

public LAB9(String name, String password) {

    this.name = name;

    this.password = password;

}

public String display()

{

    if (name.contains("abcxyz")&& password.contains("123"))

    {

        return "LOGGED IN";

    }

    else

    {

        return "LOGIN FAIL!!";

    }

}

```

MainFrame SOURCE CODE:

```

private void clickActionPerformed(java.awt.event.ActionEvent evt) {

    String name= username.getText();

    String pass =password.getName();

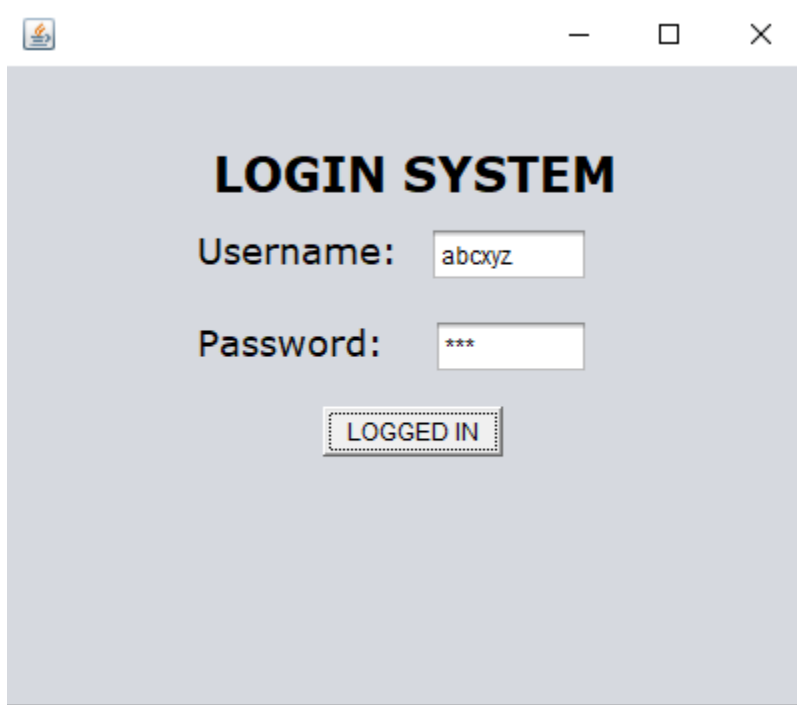
    LAB9 obj=new LAB9(name,pass);

    String login=obj.display();

```

```
click.setLabel(String.valueOf(login));  
}
```

OUTPUT:



LOGIN SYSTEM

Username:

Password:

LOGGED IN