

## Practical No. 4

**Use of CardLayout to write a program to create a two-level card deck that allows the user to select an operating system.**

**Exercise 1) Write Java program to display following output.**

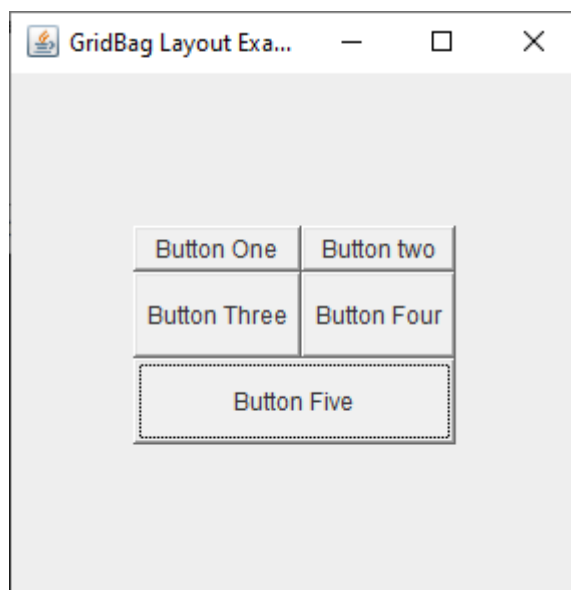
```
import java.awt.Button;
import java.awt.GridBagConstraints;
import java.awt.GridBagLayout;
import javax.swing.*;

public class Practical4Q1 extends JFrame
{
    public static void main(String[] args)
    {
        Practical4Q1 a = new Practical4Q1();
    }

    public Practical4Q1()
    {
        GridBagLayout grid = new GridBagLayout();
        GridBagConstraints gbc = new GridBagConstraints();
        setLayout(grid);
        setTitle("GridBag Layout Example");
        GridBagLayout layout = new GridBagLayout();
        this.setLayout(layout);
        gbc.fill = GridBagConstraints.HORIZONTAL;
        gbc.gridx = 0;
        gbc.gridy = 0;
        this.add(new Button("Button One"), gbc);
        gbc.gridx = 1;
        gbc.gridy = 0;
        this.add(new Button("Button two"), gbc);
        gbc.fill = GridBagConstraints.HORIZONTAL;
```

```
gbc.ipady = 20;
gbc.gridx = 0;
gbc.gridy = 1;
this.add(new Button("Button Three"), gbc);
gbc.gridx = 1;
gbc.gridy = 1;
this.add(new Button("Button Four"), gbc);
gbc.gridx = 0;
gbc.gridy = 2;
gbc.fill = GridBagConstraints.HORIZONTAL;
gbc.gridwidth = 2;
this.add(new Button("Button Five"), gbc);
setSize(300, 300);
setPreferredSize(getSize());
setVisible(true);
setDefaultCloseOperation(EXIT_ON_CLOSE);
}
}
```

## OUTPUT:



## 2) Write Java Program to display following output.

```
import java.awt.*;
import javax.swing.*;

public class Practical4Q2 extends JFrame
{
    public static void main(String[] args)
    {
        Practical4Q2 a = new Practical4Q2();
    }
    public Practical4Q2()
    {
        Label l1 = new Label("Name");
        Label l2 = new Label("Comments");
        GridBagLayout grid = new GridBagLayout();
        GridBagConstraints gbc = new GridBagConstraints();
        GridBagConstraints gbc1 = new GridBagConstraints();
        setLayout(grid);
        setTitle("GridBagLayout in Java Example");
        GridBagLayout layout = new GridBagLayout();
        this.setLayout(layout);
        gbc.gridx = 0;
        gbc.gridy = 0;
        this.add(l1, gbc);
        gbc.gridx = 1;
        gbc.gridy = 0;
        this.add(new TextField(10), gbc);
        gbc1.gridx = 0;
        gbc1.gridy = 1;
        this.add(l2, gbc1);
        gbc1.gridx = 1;
```

```
        gbc1.gridy = 1;  
        this.add(new TextArea(5,15), gbc1);  
        gbc1.gridx = 1;  
        gbc1.gridy = 2;  
        this.add(new Button("Submit"), gbc1);  
        setSize(300, 300);  
        setVisible(true);  
        setDefaultCloseOperation(EXIT_ON_CLOSE);  
    }  
}
```

## OUTPUT:

