20MCA132 OBJECT ORIENTED PROGRAMMING LAB

CO5 CLASS 3

SUBMITTED BY

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SUBMITTED TO ,

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Course Outcome5 (CO5)

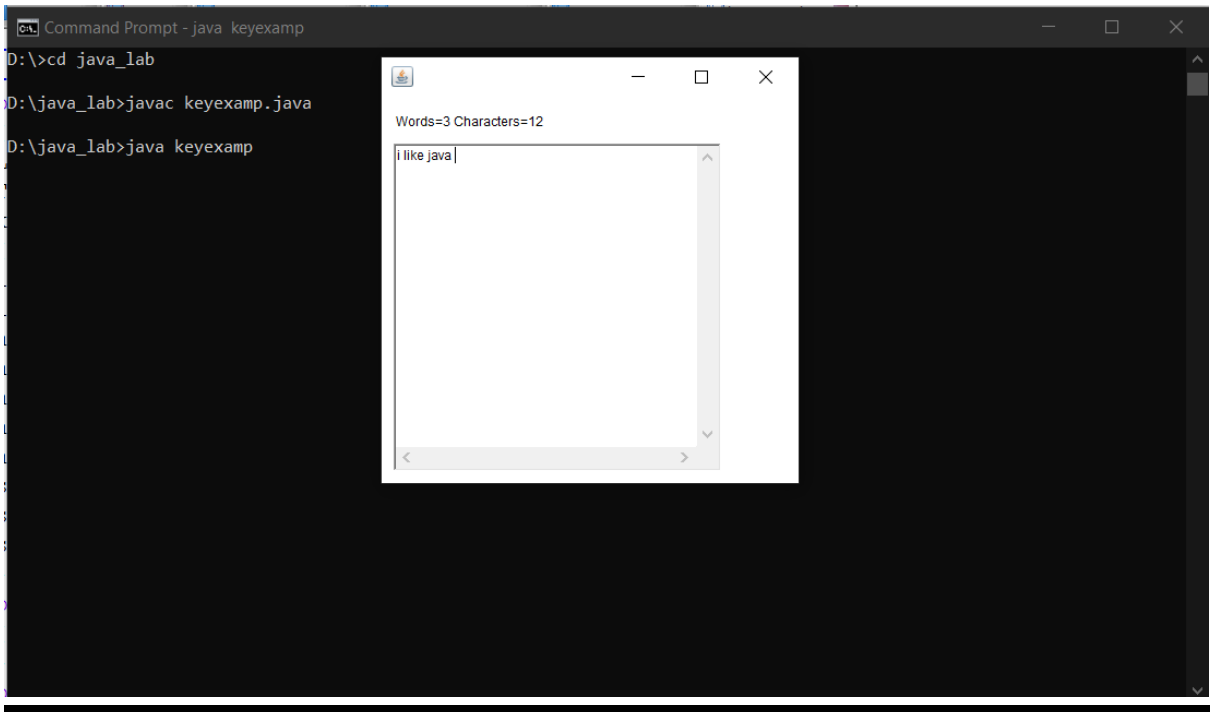
1. Develop a program to handle Key events.

PROGRAM

```
import java.awt.*;
import java.awt.event.*;
public class keyexamp extends Frame implements KeyListener
{
Label l;
TextArea a;
keyexamp()
{
l=new Label();
l.setBounds(20,50,200,20);
a=new TextArea();
a.setBounds(20,80,300,300);
a.addKeyListener(this);
add(l);
add(a);
setSize(400,400);
setLayout(null);
setVisible(true);
}
public void keyPressed(KeyEvent e)
{
}
public void keyReleased(KeyEvent e)
{
String t=a.getText();
String w[]=t.split("\\s");
```

```
l.setText("Words="+w.length+" Characters="+t.length());
}
public void keyTyped(KeyEvent e)
{}
public static void main(String args[])
{
new keyexamp();
}
}
```

OUTPUT



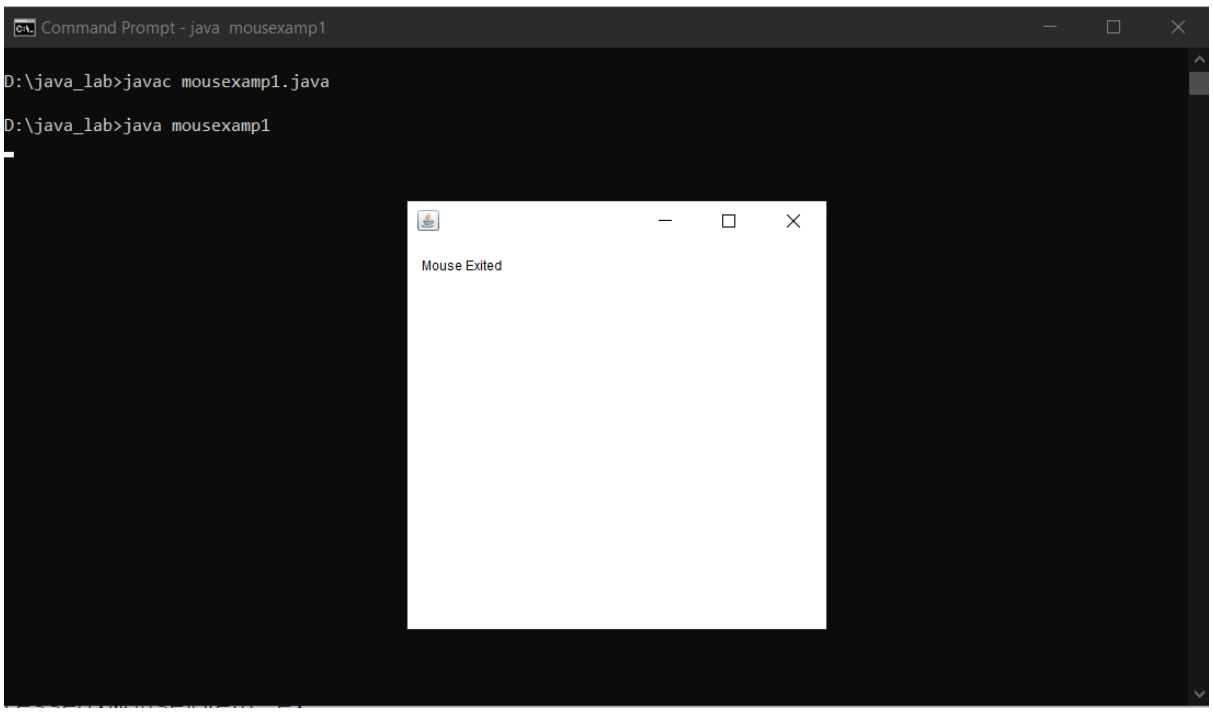
2. Develop a program to handle all mouse events

PROGRAM

```
import java.awt.*;
import java.awt.event.*;
public class mousexamp1 extends Frame implements MouseListener
{
Label l;
mousexamp1()
{
addMouseListener(this);
l=new Label();
l.setBounds(20,50,100,20);
add(l);
setSize(400,400);
setLayout(null);
setVisible(true);
}
public void mouseClicked(MouseEvent e)
{
l.setText("Mouse Clicked");
}
public void mouseEntered(MouseEvent e)
{
l.setText("Mouse Entered");
}
public void mouseExited(MouseEvent e)
{
l.setText("Mouse Exited");
}
public void mousePressed(MouseEvent e)
```

```
{
l.setText("Mouse Pressed");
}
public void mouseReleased(MouseEvent e)
{
l.setText("Mouse Released");
}
public static void main(String args[])
{
new mousexamp1();
}
}
```

OUTPUT



3. Develop a program to handle all mouse events

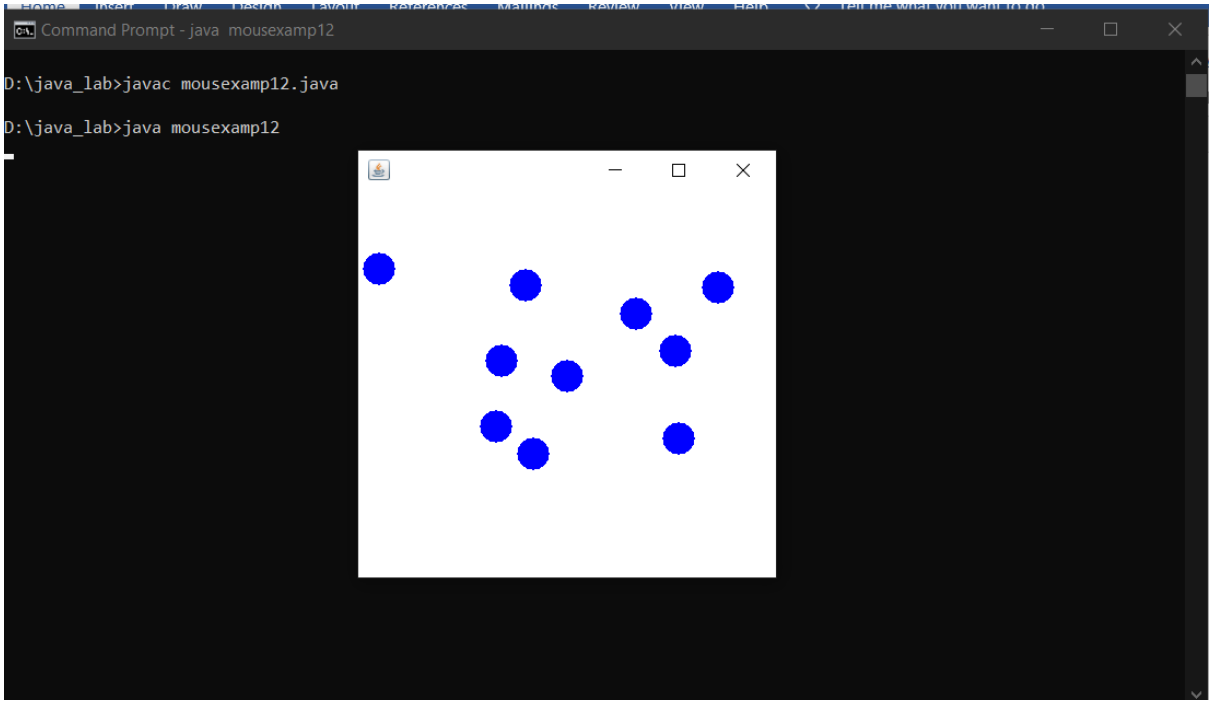
PROGRAM

```
import java.awt.*;
```

```
import java.awt.event.*;
public class mousexamp12 extends Frame implements MouseListener
{
        mousexamp12()
        {
        addMouseListener(this);
        setSize(400,400);
        setLayout(null);
        setVisible(true);
        }
        public void mouseClicked(MouseEvent  e)
        {
        Graphics g=getGraphics();
        g.setColor(Color.blue);
        g.fillOval(e.getX(),e.getY(),30,30);
        }
public void mouseEntered(MouseEvent  e)
{
}
public void mouseExited(MouseEvent  e)
{
}
public void mousePressed(MouseEvent  e)
{
}
public void mouseReleased(MouseEvent  e){
}
public static void main(String  args[])
{
new mousexamp12();
}
```

}

OUTPUT



4. Develop a program to handle all mouse motion events

PROGRAM

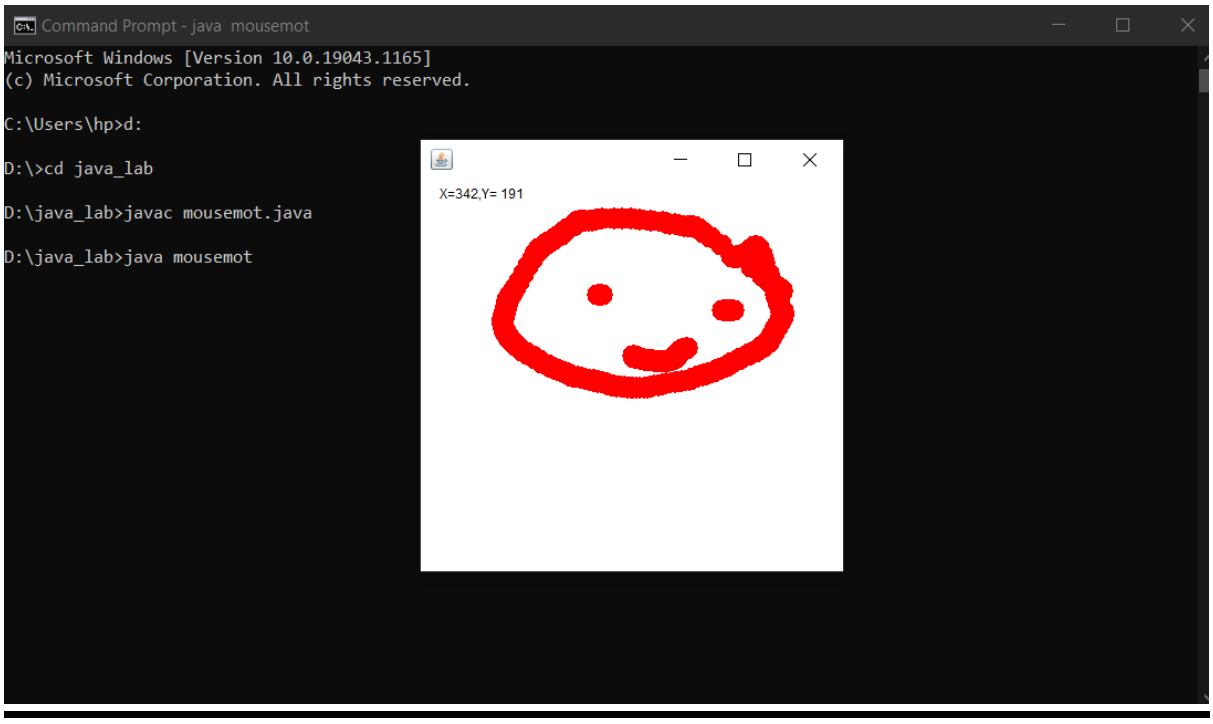
```
import java.awt.*;
import java.awt.event.MouseEvent;
import java.awt.event.MouseMotionListener;
public class mousemot extends Frame implements MouseMotionListener
{
Label l;
Color c=Color.BLUE;
mousemot()
{
l=new Label();
l.setBounds(24,40,100,20);
add(l);

addMouseMotionListener(this);
setSize(400,400);
setLayout(null);
setVisible(true);
}

public void mouseDragged(MouseEvent e)
```

```
{
l.setText("X="+e.getX()+",Y= "+e.getY());
Graphics g=getGraphics();
g.setColor(Color.RED);
g.fillOval(e.getX(),e.getY(),20,20);
}
public void mouseMoved(MouseEvent e)
{
l.setText("X="+e.getX()+",Y= "+e.getY());
}
public static void main(String args[])
{
new mousemot();
}
}
```

OUTPUT



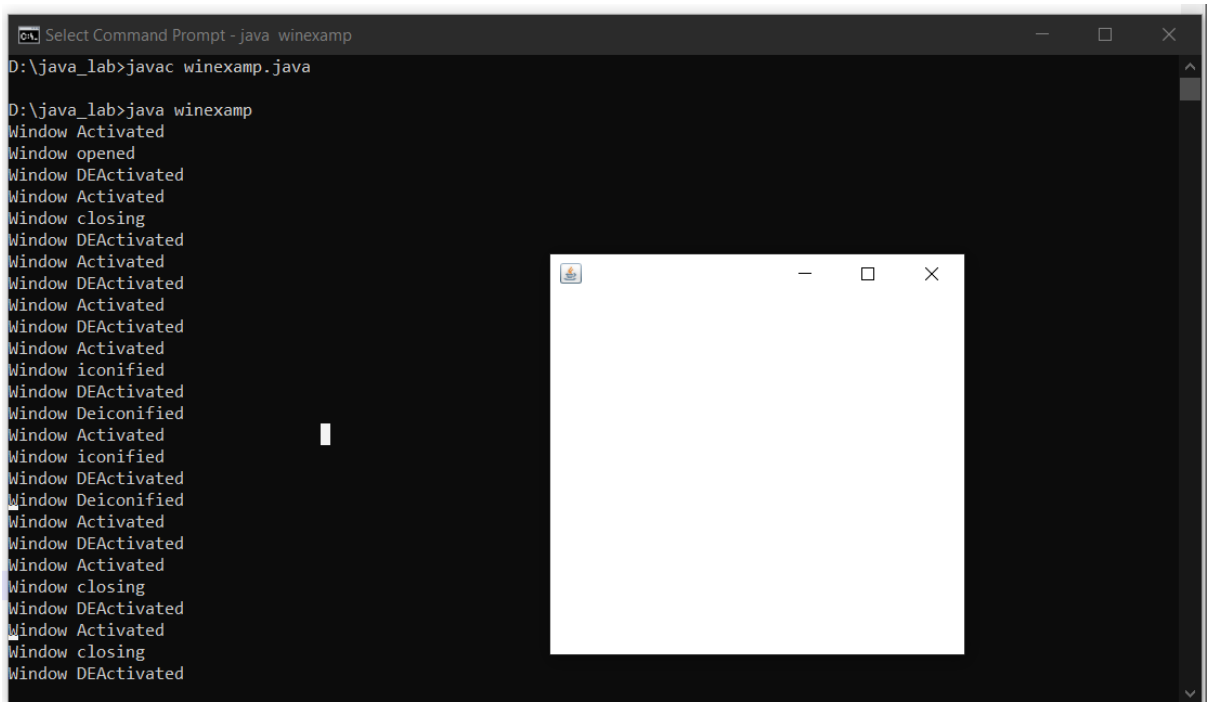
5. Develop a program to handle all window events

PROGRAM

```
import java.awt.*;
import java.awt.event.WindowEvent;
import java.awt.event.WindowListener;
public class winexamp extends Frame implements WindowListener
{
winexamp()
```

```
{
addWindowListener(this);
setSize(400,400);
setLayout(null);
setVisible(true);
}
public static void main(String args[])
{
new winexamp();
}
public void windowActivated(WindowEvent arg0)
{
System.out.println("Window Activated");
}
public void windowClosed(WindowEvent args0)
{
System.out.println("Window closed");
}
public void windowClosing(WindowEvent arg0)
{
System.out.println("Window closing");
}
public void windowDeactivated(WindowEvent arg0)
{
System.out.println("Window DEActivated");
}
public void windowDeiconified(WindowEvent arg0)
{
System.out.println("Window Deiconified");
}
public void windowIconified(WindowEvent arg0)
{
System.out.println("Window iconified");
}
public void windowOpened(WindowEvent arg0)
{
System.out.println("Window opened");
}
}
```

OUTPUT


Select Command Prompt - java winexamp
D:\java_lab>javac winexamp.java
D:\java_lab>java winexamp
Window Activated
Window opened
Window DEActivated
Window Activated
Window closing
Window DEActivated
Window Activated
Window DEActivated
Window Activated
Window DEActivated
Window Activated
Window iconified
Window DEActivated
Window Deiconified
Window Activated
Window iconified
Window DEActivated
Window Deiconified
Window Activated
Window DEActivated
Window Activated
Window closing
Window DEActivated
Window Activated
Window closing
Window DEActivated