LABS

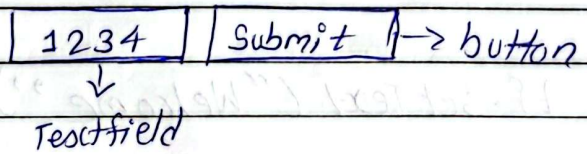
1. Creating label, button and Textfield in a frame using AWT

=>

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

public class AWTExample extends WindowAdapter{
        Frame f;
        AWTExample(){
                f = new Frame();

                Label l = new Label("Employee id:");
                Button b = new Button("Submit");

                Textfield t = new Textfield();

                l.setBounds(20,80,80,30);
                t.setBounds(20,100,80,30);
                b.setBounds(100,100,80,30);

                f.add(b);
                f.aAd(l);
                f.add(t);

                f.setsize(400,300);

                f.setTitle("Employee info");

                f.setlayout(null);

                f.setVisible(true);
        }
```

```
public void windowClosing (WindowEvent e)
{
    System.exit(0);
}

public static void main(String[] args){
    AWTExample awt_obj = new
                         AWTExample();
  }
}
```

Output :-



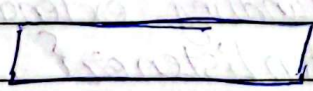
2. Create a button and add a action listener for Mouse click.

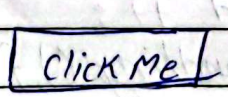
=>

```
import java.awt.*;
import java.awt.event.*;
public class EventHandling extends WindowAdapter
  implements ActionListener{
        Frame f;
        Textfield tf;
        EventHandling(){
```

```
f = new Frame();

Button b = new Button("Click me");
b.setBound(100, 120, 80, 30);

b.addActionListner(this);

f.add(b); f.add(tf);
f.setSize(300, 300);
f.setLayout(null);
f.setVisible(true);
}

public void actionPerformed(ActionEvent e)
{
    tf.setText("Welcome");
}

public void windowClosing(WindowEvent e)
{
    new EventHandling();
}
}
```

Output:





3. Example 1:

=>

```
impoot java.io.*;
public class ByteArrayInput{
    public static void main (String[] args)
    throws IOException{
        byte[] buf = {35, 36, 37, 38};

        Byte_ArrayInputStream byt = new
                ByteArrayInputStream (buf);
        int k=0
        while ((k= byt.read()) != -1){

        char ch = (char) k;
        system.out.println ("ASCII value of
          character is :"+k+ "; special char.
          is :" + ch);
        }
    }
}
```

Output:

ASCII value of character is -1; special character is ?

4. Example 2:

=>

```
import java.io.*;
public class ByteArray_ex{
    public static void main(String args[])
    throw Exception{
        FileOutputstream fout1=
        new FileOutputStream("Example1.txt");

        FileOutputStream fout2= new
        FileOutputStream("Example2.txt");

        ByteArrayOutputStream bout=
        new ByteArrayOutputStream();

        bout.write(65);
        bout.writeTo(fout1);
        bout.writeTo(fout2);

        bout.flush();
        bout.close();
        System.out.println("Success...");
    }
}
```

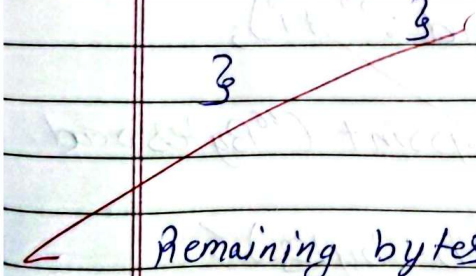
Output:

Success....

5. Example 3:

=>

```
public class FileEx {
    public static void main(String a[]) throws
    IOException {
        FileInputStream fin = new fileInputStream
        ("Example.txt");
        int content;
        System.out.println("Remaining bytes
        that can be read: "+fin.available());

        content = fin.read();
            System.out.print((char)content+" ");
            System.out.print(content+" ");
            System.out.print("Remaining
            byte that can be read: "+fin.
            available());
    }
}
```



Remaining bytes that can be read: 1.
A 65

Remaining byte that can be read: 0.

6. Example 1.

=>

```
import java.io.FileInputStream;
import java.io.IOException;

public class File Ex2{
    public static void main(String a[])
    throws IOException{
        FileInputStream fin = new FileInput-
        Stream ("Example.txt");

        byte[] bytes = new byte[20];
        int i;
        char c;
        i = fin.read(bytes);

        System.out.println("Number of
          bytes read: " + i);

        System.out.print("Bytes read:");

        for (byte b : bytes) {
            c = (char) b;
            System.out.print(c);
        }
    }
}
```

Number of bytes read: 5.
Byte read: p.