

Date: 02/08/24

APP 1: Login Page

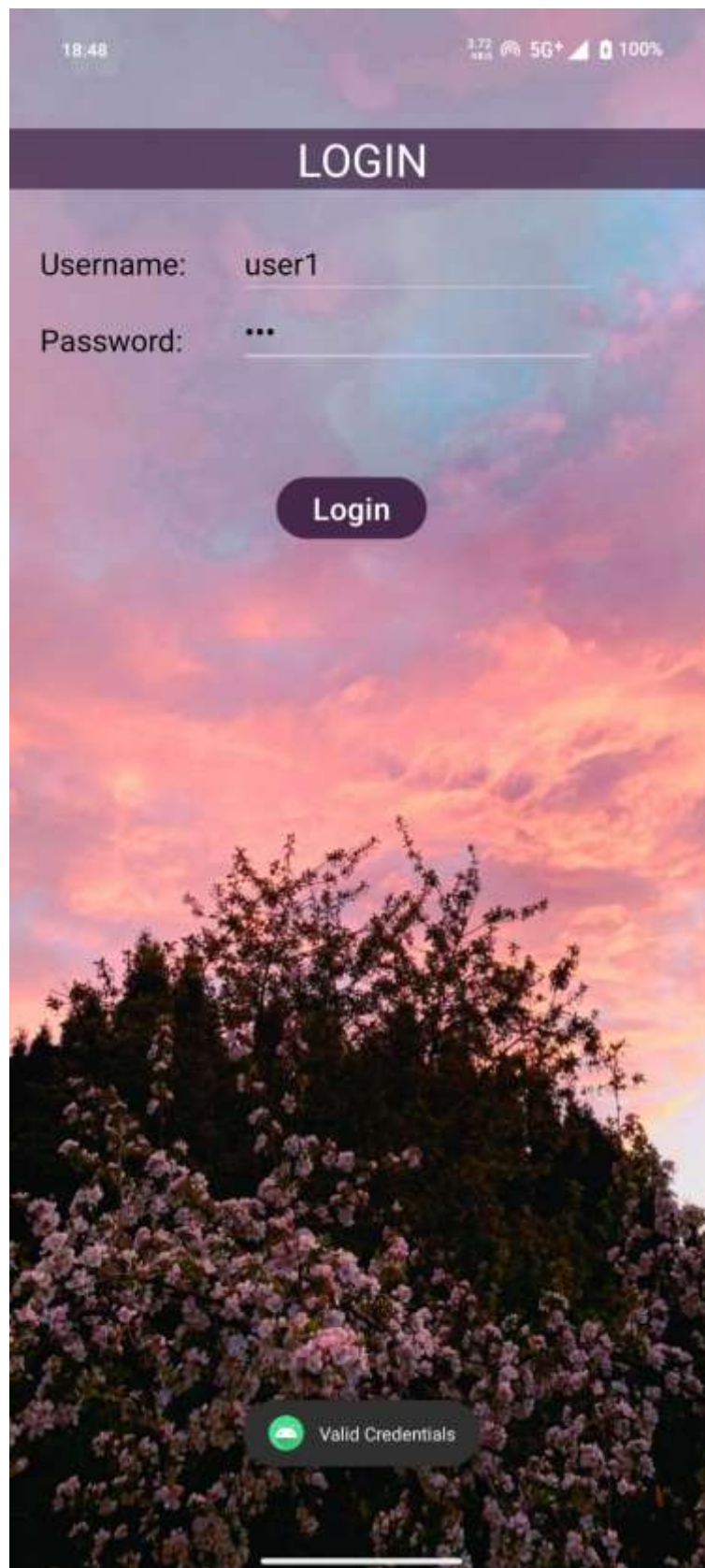
Aim: Design a Login page with username and password using Linear Layout and Toast valid and invalid credentials.

Program Code:

MainActivity.java

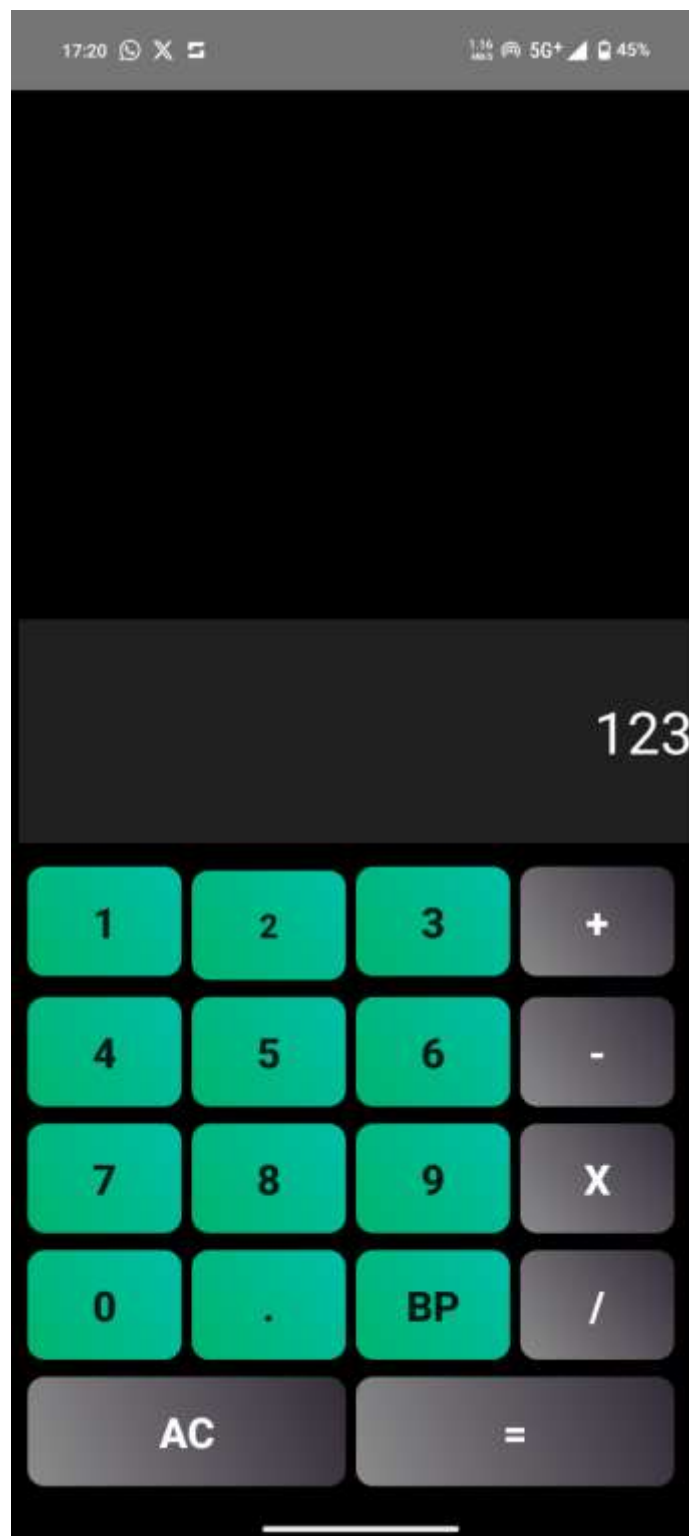
```
package com.example.login;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity
{
    Button b;
    EditText u,p;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        b=(Button) findViewById(R.id.b);
        u=(EditText) findViewById(R.id.user);
        p=(EditText) findViewById(R.id.pass);
        b.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View view)
            {
                String user=u.getText().toString();
                String pass=p.getText().toString();
                if (user.equals("user1")&& pass.equals("123"))
                    Toast.makeText(getApplicationContext(),"Valid Credentials",Toast.LENGTH_SHORT)
                        .show();
                else
                    Toast.makeText(getApplicationContext(),"Invalid Credentials",
                        Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```



```
@Override
public void onClick(View view)
{
    t1.setText("");
}
});
}

private void handleButtonClick(int id)
{
    String txt = t1.getText().toString();
    if (id == R.id.b16)
    {
        if (!firstNumber.isEmpty() && !operator.isEmpty())
        {
            String secondNumber = txt;
            double result = 0;
            double num1 = Double.parseDouble(firstNumber);
            double num2 = Double.parseDouble(secondNumber);
            switch (operator)
            {
                case "+":
                    result = num1 + num2;
                    break;
                case "-":
                    result = num1 - num2;
                    break;
                case "x":
                    result = num1 * num2;
                    break;
                case "/":
                    result = num1 / num2;
                    break;
            }
            t1.setText(String.valueOf(result));
            firstNumber = "";
            operator = "";
        }
    }
    else if (id == R.id.b10)
    {
        if (!txt.contains("."))
            t1.setText(txt + ((Button) findViewById(id)).getText());
    }
    else if (id == R.id.b12 || id == R.id.b13 || id == R.id.b14 || id == R.id.b15)
    {
        if (!txt.isEmpty())
        {
            firstNumber = txt;
            operator = ((Button) findViewById(id)).getText().toString();
            t1.setText("");
        }
    }
    else if (id == R.id.b11)
    {
        if (txt.length() > 0)
            t1.setText(txt.substring(0, txt.length() - 1));
    }
}
```



Date: 09/08/24

APP 3: Intent

Aim: Create 2 activities, 1st activity contains login details, when clicked on submit go to 2nd activity.

Program Code:

MainActivity.java

```
package com.example.loginapp;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity
{
    Button b;
    EditText u,p;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        b=(Button) findViewById(R.id.b);
        u=(EditText) findViewById(R.id.user);
        p=(EditText) findViewById(R.id.pass);
        b.setOnClickListener(new View.OnClickListener()
        {
            @Override
            public void onClick(View view)
            {
                String user=u.getText().toString();
                String pass=p.getText().toString();
                if (user.equals("user1")&& pass.equals("123"))
                {
                    Toast.makeText(getApplicationContext(),"Valid Credentials",Toast.LENGTH_SHORT)
                        .show();
                    Intent i=new Intent(MainActivity.this,HomePage.class);
                    i.putExtra("user",user);
                    startActivity(i);
                }
                else
                {
                    Toast.makeText(getApplicationContext(),"Invalid Credentials",
                        Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}
```



```
        android:text="This is the Home Page:"
        android:layout_marginTop="100dp"
        android:layout_marginLeft="125dp"
        android:textSize="20dp"
        android:textColor="#000000"/>

<Button
    android:id="@+id/b"
    android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:layout_marginLeft="175dp"
        android:layout_marginTop="875dp"
        android:backgroundTint="#ffa99f"
        android:textColor="#B23B1E40"
        android:text="Logout"
        android:textSize="20dp"/>
</RelativeLayout>
</LinearLayout>
```

Result: The program has executed successfully and output is verified.

```
13428-13428 Appstate      com.example.start      D   Created
13428-13428 Appstate      com.example.start      D   Starting
13428-13428 Appstate      com.example.start      D   Resuming
13428-13428 Appstate      com.example.start      D   Paused
13428-13428 Appstate      com.example.start      D   Stopped
13428-13428 Appstate      com.example.start      D   Restarted
13428-13428 Appstate      com.example.start      D   Starting
13428-13428 Appstate      com.example.start      D   Resuming
13428-13428 Appstate      com.example.start      D   Paused
13428-13428 Appstate      com.example.start      D   Stopped
13428-13428 Appstate      com.example.start      D   Restarted
13428-13428 Appstate      com.example.start      D   Starting
13428-13428 Appstate      com.example.start      D   Resuming
13428-13428 Appstate      com.example.start      D   Paused
13428-13428 Appstate      com.example.start      D   Stopped
13428-13428 Appstate      com.example.start      D   Destroyed
----- PROCESS ENDED (13428) for package com.example.start -----
```