QN1

MainActivity.java

```java
package com.example.lab01;

import android.content.Intent;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {
    EditText nameEditText;
    Button submitButton;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        nameEditText = findViewById(R.id.nameEditText);
        submitButton = findViewById(R.id.submitButton);
        submitButton.setOnClickListener(v -> {
            String name = nameEditText.getText().toString();
            Intent intent = new Intent(MainActivity.this, ResultActivity.class);
            intent.putExtra("name_key", name);
            startActivity(intent);
        });
```

```
    }
}
```

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="20dp">

    <EditText
        android:id="@+id/nameEditText"
        android:hint="Enter your name"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <Button
        android:id="@+id/submitButton"
        android:text="Submit"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"/>
</LinearLayout>
```

ResultaActivity.java

```java
package com.example.lab01;

import android.os.Bundle;

import android.widget.TextView;

import android.content.Intent;

import androidx.appcompat.app.AppCompatActivity;

public class ResultActivity extends AppCompatActivity {

    TextView resultTextView;


    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_result);

        resultTextView = findViewById(R.id.resultTextView);

        String receivedName = getIntent().getStringExtra("name_key");

        resultTextView.setText("Welcome, " + receivedName + "!");

    }
}
```


Activity_result.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout

    xmlns:android="http://schemas.android.com/apk/res/android"

    android:orientation="vertical"

    android:layout_width="match_parent"
```

```xml
        android:layout_height="match_parent"

        android:padding="20dp">


    <TextView

        android:id="@+id/resultTextView"

        android:text="Result will appear here"

        android:textSize="18sp"

        android:layout_width="match_parent"

        android:layout_height="wrap_content"/>
</LinearLayout>
```
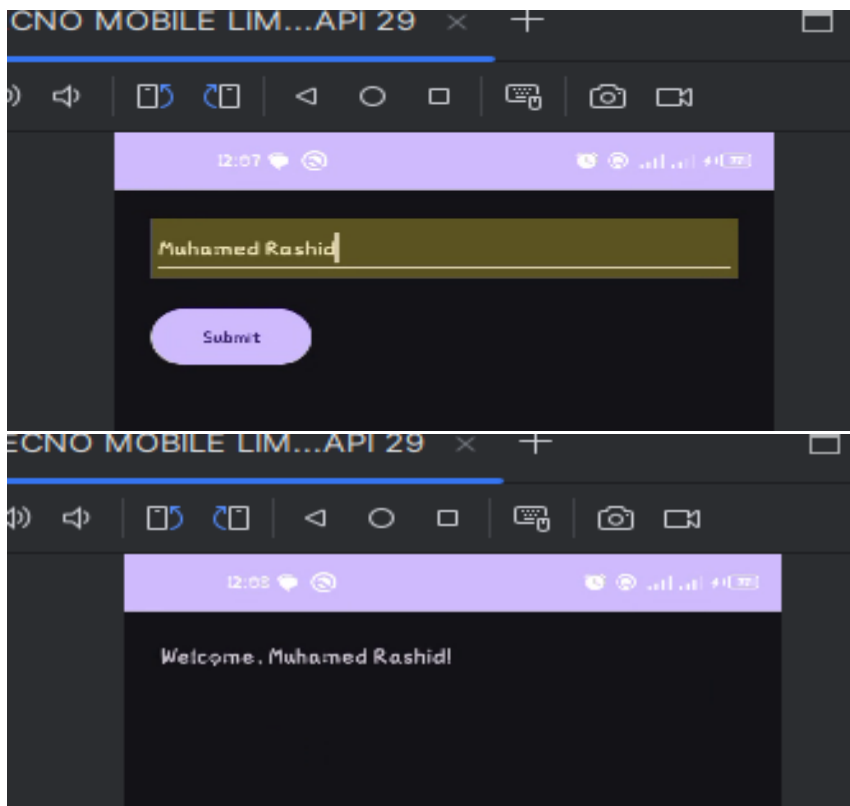
QN2

MainActivity.java

```java
package com.example.lab02;

import android.os.Bundle;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity;


public class MainActivity extends AppCompatActivity {

    EditText usdIn, tzsOut, euroOut;

    Button convertBtn;

    final double USD_TO_TZS = 1600.0;

    final double USD_TO_EURO = 0.773;


    @Override
    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity_main);


        usdIn = findViewById(R.id.usdIn);

        tzsOut= findViewById(R.id.tzsOut);

        euroOut = findViewById(R.id.euroOut);

        convertBtn = findViewById(R.id.convertBtn);

        convertBtn.setOnClickListener(v -> {
```

```java
        String input = usdIn.getText().toString().trim();


        try {
            if (input.isEmpty()) {
                Toast.makeText(this, "Please enter  amount",
Toast.LENGTH_SHORT).show();
                return;
            }
            double usdAmount = Double.parseDouble(input);
            double tzs = usdAmount * USD_TO_TZS;
            double euro = usdAmount * USD_TO_EURO;
            tzsOut.setText(String.format("%.2f TZS", tzs));
            euroOut.setText(String.format("%.2f Euro", euro));
        } catch (NumberFormatException e) {
            Toast.makeText(this, "Invalid input. Enter numbers only.",
Toast.LENGTH_SHORT).show();
        }
    });
  }
}
```

Activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
```

```xml
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:padding="20dp">

    <EditText
        android:id="@+id/usdIn"
        android:hint="Enter USD Amount"
        android:inputType="numberDecimal"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <EditText
        android:id="@+id/tzsOut"
        android:hint="TZS"
        android:enabled="false"
        android:layout_marginTop="16dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>

    <EditText
        android:id="@+id/euroOut"
        android:hint="Euro"
        android:enabled="false"
        android:layout_marginTop="8dp"
        android:layout_width="match_parent"
```

```
            android:layout_height="wrap_content"/>


    <Button
        android:id="@+id/convertBtn"
        android:text="Convert"
        android:layout_width="wrap_content"
        android:layout_marginTop="20dp"
        android:layout_height="wrap_content"/>
</LinearLayout>
```