

CYCLE-2

Question-1

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="TextView"
        tools:layout_editor_absoluteX="176dp"
        tools:layout_editor_absoluteY="269dp"

        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.datetime;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.widget.TextView;

import java.text.SimpleDateFormat;
import java.util.Date;

public class MainActivity extends AppCompatActivity {
```

```

@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
    TextView textView=findViewById(R.id.textView);
    SimpleDateFormat sdf=new SimpleDateFormat("yyyy.MM.dd G 'at'HH:mm:ss
z");
    String currentDateandTime=sdf.format(new Date());
    textView.setText(currentDateandTime);
}

}

```

Output



Question-2

MainActivity.java

```
package com.example.activity_lifecycle;

import androidx.appcompat.app.AppCompatActivity;
import android.util.Log;
import android.os.Bundle;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Log.d("lifecycle", "onCreate invoked");
    }

    @Override
    protected void onStart() {
        super.onStart();
        Log.d("lifecycle", "onStart invoked");
    }

    @Override
    protected void onResume() {
        super.onResume();
        Log.d("lifecycle", "onResume invoked");
    }

    @Override
    protected void onPause() {
        super.onPause();
        Log.d("lifecycle", "onPause invoked");
    }

    @Override
    protected void onStop() {
        super.onStop();
        Log.d("lifecycle", "onStop invoked");
    }

    @Override
    protected void onRestart() {
        super.onRestart();
        Log.d("lifecycle", "onRestart invoked");
    }

    @Override
    protected void onDestroy() {
        super.onDestroy();
        Log.d("lifecycle", "onDestroy invoked");
    }
}
```

```
}
```

Activity_main..xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <Button
        android:id="@+id/button2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="hai"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499"
        tools:ignore="MissingConstraints" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

Output

```
Emulator Pixel_4_XL_API_27_Andr... | com.example.activity_lifecycle (105) | Verbose | 🔍 | [x] Regex | Show only selected application

2022-02-09 21:02:00.860 10509-10509/? I/zygote: Late-enabling -Xcheck:jni
2022-02-09 21:02:00.870 10509-10509/? W/zygote: Unexpected CPU variant for X86 using defaults: x86
2022-02-09 21:02:01.096 10509-10509/com.example.activity_lifecycle D/lifecycle: onCreate invoked
2022-02-09 21:02:01.098 10509-10509/com.example.activity_lifecycle D/lifecycle: onStart invoked
2022-02-09 21:02:01.102 10509-10509/com.example.activity_lifecycle D/lifecycle: onResume invoked
2022-02-09 21:02:01.111 10509-10533/com.example.activity_lifecycle D/OpenGLRenderer: HWUI GL Pipeline
2022-02-09 21:02:01.163 10509-10533/com.example.activity_lifecycle I/zygote: android:hardware::configstore::V1_0::ISurfaceFlingerConfigs::hasWideColorDisplay retrieved: 0
2022-02-09 21:02:01.163 10509-10533/com.example.activity_lifecycle I/OpenGLRenderer: Initialized EGL, version 1.4
2022-02-09 21:02:01.163 10509-10533/com.example.activity_lifecycle D/OpenGLRenderer: Swap behavior 1
2022-02-09 21:02:01.164 10509-10533/com.example.activity_lifecycle W/OpenGLRenderer: Failed to choose config with EGL_SWAP_BEHAVIOR_PRESERVED, retrying without...
2022-02-09 21:02:01.164 10509-10533/com.example.activity_lifecycle D/OpenGLRenderer: Swap behavior 0
2022-02-09 21:02:01.172 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglCreateContext: 0xdb2050c0: maj 2 min 0 rev 2
2022-02-09 21:02:01.193 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglMakeCurrent: 0xdb2050c0: ver 2 0 (tinfo 0xdb203240)
2022-02-09 21:02:01.244 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglMakeCurrent: 0xdb2050c0: ver 2 0 (tinfo 0xdb203240)
2022-02-09 21:02:05.123 10509-10509/com.example.activity_lifecycle D/lifecycle: onPause invoked
2022-02-09 21:02:05.144 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglMakeCurrent: 0xdb2050c0: ver 2 0 (tinfo 0xdb203240)
2022-02-09 21:02:05.146 10509-10509/com.example.activity_lifecycle D/lifecycle: onStop invoked
2022-02-09 21:02:21.506 10509-10509/com.example.activity_lifecycle D/lifecycle: onRestart invoked
2022-02-09 21:02:21.507 10509-10509/com.example.activity_lifecycle D/lifecycle: onStart invoked
2022-02-09 21:02:21.508 10509-10509/com.example.activity_lifecycle D/lifecycle: onResume invoked
2022-02-09 21:02:21.570 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglMakeCurrent: 0xdb2050c0: ver 2 0 (tinfo 0xdb203240)
2022-02-09 21:02:27.454 10509-10509/com.example.activity_lifecycle D/lifecycle: onPause invoked
2022-02-09 21:02:27.464 10509-10533/com.example.activity_lifecycle D/EGL_emulation: eglMakeCurrent: 0xdb2050c0: ver 2 0 (tinfo 0xdb203240)
2022-02-09 21:02:27.467 10509-10509/com.example.activity_lifecycle D/lifecycle: onStop invoked
2022-02-09 21:02:39.271 10509-10509/com.example.activity_lifecycle D/lifecycle: onDestroy invoked
```

Question-3

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    >

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Press ME"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499">

    </Button>

/>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

Activity_second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    >

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Press ME"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499">

    </Button>

</>

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.intents;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.view.View;

import android.os.Bundle;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```

        setContentView(R.layout.activity_main);
        btn = (Button) findViewById(R.id.button);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Intent intent=new Intent(getApplicationContext(),
second_activity.class);
                startActivity(intent);
            }
        });
    }
}

```

second_activity.java

```

package com.example.intents;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class second_activity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_second);
        TextView text=findViewById(R.id.text);
        text.setText("HELLO");
    }
}

```

AndroidManifest.xml

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.intents">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/Theme.Intents">
        <activity
            android:name=".MainActivity"

```

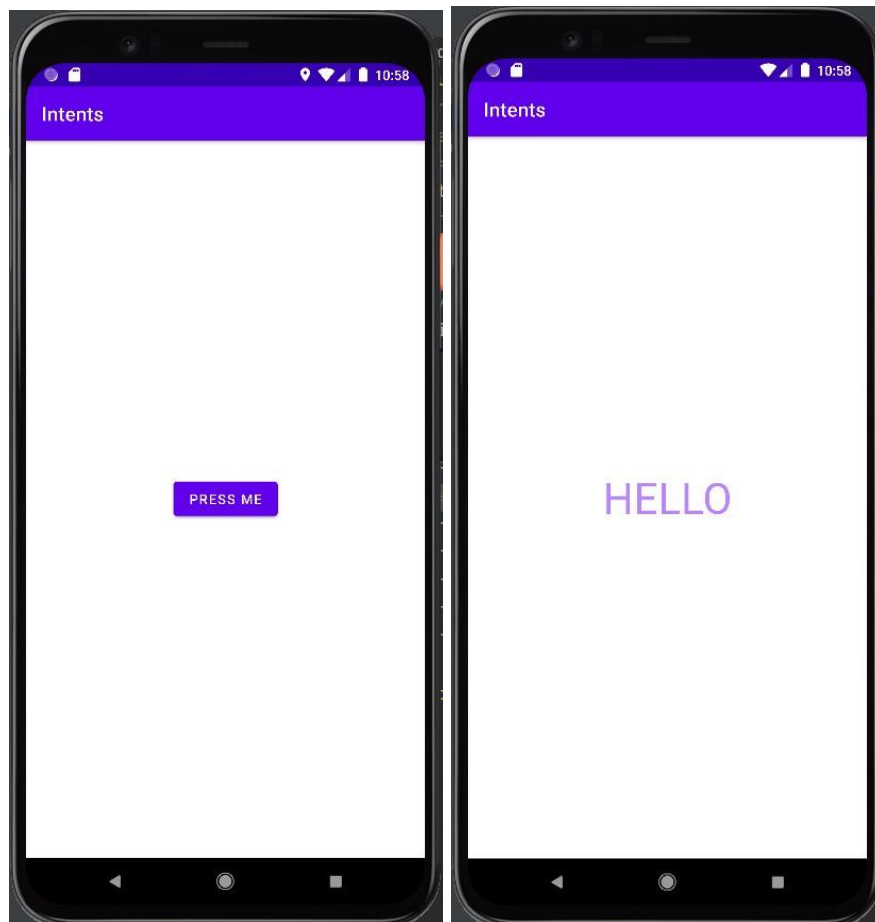
```
        android:exported="true">
        <intent-filter>
            <action android:name="android.intent.action.MAIN" />

            <category android:name="android.intent.category.LAUNCHER" />
        </intent-filter>
    </activity>
    <activity android:name=".second_activity">

    </activity>
</application>

</manifest>
```

Output



Question-4

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    >

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Send"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499">

    </Button>

    <EditText
        android:id="@+id/editText"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:hint="Type Here"
        android:ems="10"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.403" />

    />

</androidx.constraintlayout.widget.ConstraintLayout>
```

second_activity.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".second_activity"
    >
    <TextView
        android:id="@+id/text"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        tools:layout_editor_absoluteX="178dp"
        tools:layout_editor_absoluteY="351dp"
        tools:ignore="MissingConstraints"
        android:textColor="@color/purple_200"
        android:textSize="44dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499"/>

</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.dataintents;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.view.View;

import android.os.Bundle;
import android.widget.Button;
import android.widget.EditText;

public class MainActivity extends AppCompatActivity {
    Button btn;
    EditText editText;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
}
```

```

        btn = (Button) findViewById(R.id.button);
        editText = (EditText) findViewById(R.id.editText);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String str= editText.getText().toString();
                Intent intent=new Intent(getApplicationContext(),
second_activity.class);
                intent.putExtra("message_key", str);
                startActivity(intent);
            }
        });
    }
}

```

Second_activity.java

```

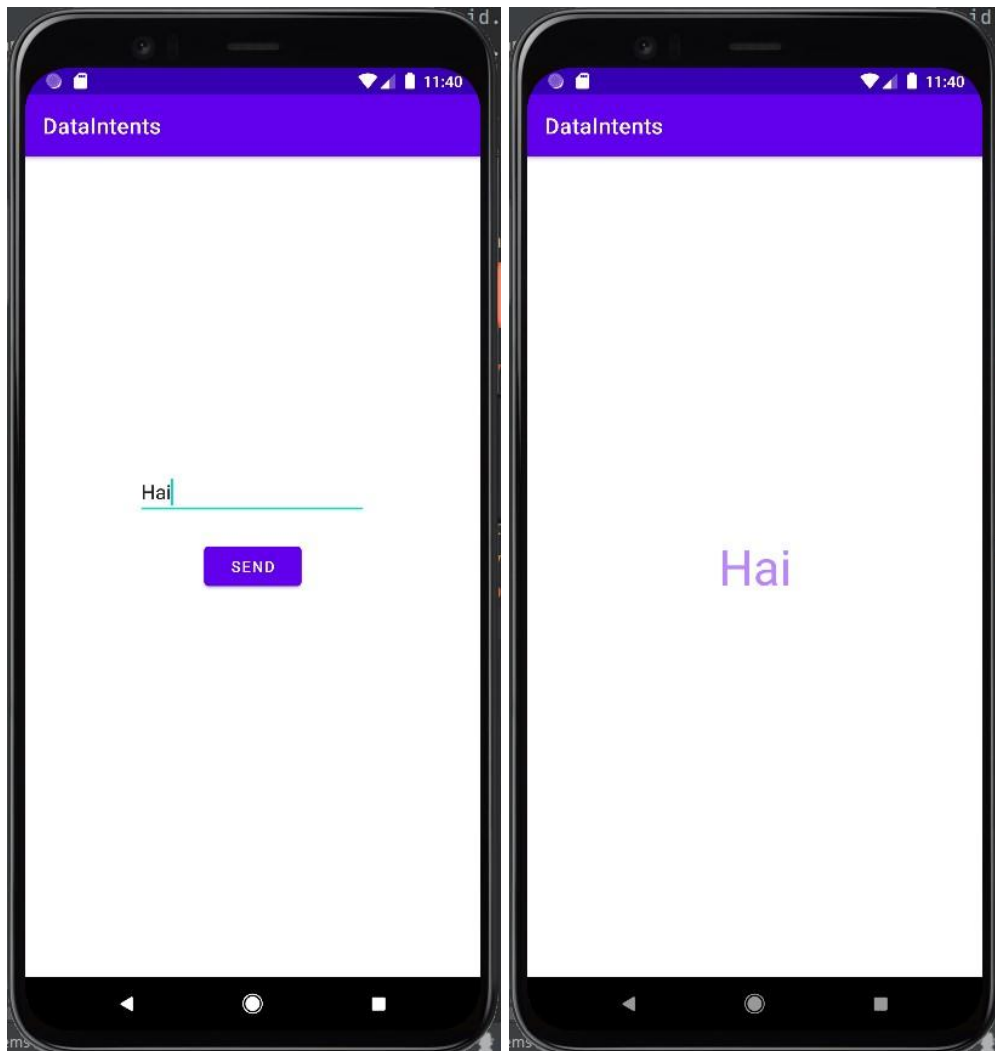
package com.example.dataintents;
import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class second_activity extends AppCompatActivity {
    TextView text;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.second_activity);
        text=(TextView) findViewById(R.id.text);
        Intent intent= getIntent();
        String str=intent.getStringExtra("message_key");
        text.setText(str);
    }
}

```

Output



Question-5

Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    >

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Implicit Intent"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintVertical_bias="0.499">

    </Button>
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java

```
package com.example.implicit_intents;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.net.Uri;
import android.view.View;

import android.os.Bundle;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    Button btn;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```

setContentView(R.layout.activity_main);
btn = (Button) findViewById(R.id.button);
btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        Intent intent=new Intent(Intent.ACTION_VIEW);

intent.setData(Uri.parse("https://en.wikipedia.org/wiki/Main_Page"));
        startActivity(intent);
    }
});
}
}
}

```

Output

