**Q1**

**MainActivity.java**

**package** com.example.wifi\_test;  
  
**import** androidx.appcompat.app.AppCompatActivity;  
  
**import** android.os.Bundle;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.TextView;

**public class** MainActivity **extends** AppCompatActivity {  
  
  
 EditText **roomET** , **nameET** ;  
 Button **generate** ;  
 TextView **psw**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
  
 **roomET** = findViewById(R.id.***roomet***);  
 **nameET** = findViewById(R.id.***nameet***);  
 **psw** = findViewById(R.id.***pswtv***);  
 **generate** = findViewById(R.id.***Genbtn***);  
  
 **generate**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View v) {  
  
 getpsw();  
  
 }

**private void** getpsw() {  
  
 String name = **nameET**.getText().toString();  
 **int** room = Integer.*parseInt*(**roomET**.getText().toString());  
 **int** ncount = name.length();  
  
 **int** sum = 0,first;  
 **while** (room > 0) {  
 sum = sum + room % 10;  
 room = room/10;  
 }  
  
 **if**(sum%2==0)  
 {  
 first = sum+1;  
 }  
 **else** {  
 first = sum;  
 }  
  
 **char** third = (**char**)(96+ncount);  
  
 **psw**.setText(**"Your wifi Password is : "**+first+**""**+sum+**""**+**""**+third);  
 }  
 });  
  
 }  
}

**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"  
 android:background="@drawable/image5"  
 tools:context=".MainActivity"**>  
  
  
 <**TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=" Password Generator "  
 android:textColor="#FFFFFF"  
 android:textSize="40sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintLeft\_toLeftOf="parent"  
 app:layout\_constraintRight\_toRightOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.045"** />  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Enter First Name"  
 android:textColor="#FFFFFF"  
 android:textSize="35dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/nameet"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.313"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView"  
 app:layout\_constraintVertical\_bias="0.442"** />  
  
 <   
 <**EditText  
 android:id="@+id/nameet"  
 android:layout\_width="300dp"  
 android:layout\_height="50dp"  
 android:textColor="#FFFFFF"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.423"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.281"** />  
  
 <**Button  
 android:id="@+id/Genbtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=" Generate "  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/nameet"  
 app:layout\_constraintVertical\_bias="0.496"** />  
  
  
 <**TextView  
 android:id="@+id/pswtv"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:textSize="25dp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.835"** />

**EditText  
 android:id="@+id/roomet"  
 android:layout\_width="300dp"  
 android:layout\_height="50dp"  
 android:textColor="#FFFFFF"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.423"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.555"** />  
  
 <**TextView  
 android:layout\_width="217dp"  
 android:layout\_height="42dp"  
 android:layout\_marginBottom="12dp"  
 android:text="Enter Room Number"  
 android:textColor="#FFFFFF"  
 android:textSize="35dp"  
 app:layout\_constraintBottom\_toTopOf="@+id/roomet"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.324"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/nameet"  
 app:layout\_constraintVertical\_bias="0.914"** />  
  
  
</**androidx.constraintlayout.widget.ConstraintLayout**>

**Output:**

