

1.android manifest

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">
<uses-permission android:name="android.permission.INTERNET"/>
💡 <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION"/>
<application
```

2.подключение библиотек valley и play.services.location

```
40     implementation(libs.play.services.location)
41     implementation(libs.volley)
```

3.activity_main.xml

```
ainActivity.kt    </> activity_main.xml  ×  AndroidManifest
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/gray"
    android:padding="16dp">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Погода"
        android:textSize="24sp"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="20dp"/>

    <Button
        android:id="@+id/btVar1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/textView"
        android:layout_centerHorizontal="true"
        android:text="Получить погоду" />
</RelativeLayout>
```

4.Activity_Main.kt

a.

```
22 class MainActivity : AppCompatActivity() {
23     private val apiKey = "9c6f21a5dba5b0169b4da9e8e0fe4a41"
24
25     private lateinit var btVar1: Button
26     private lateinit var textView: TextView
27     private lateinit var fusedLocationClient: FusedLocationProviderClient
28
29     private val LOCATION_PERMISSION_REQUEST_CODE = 1
30
31     override fun onCreate(savedInstanceState: Bundle?) {
32         super.onCreate(savedInstanceState)
33         setContentView(R.layout.activity_main)
34
35         ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
36             val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
37             v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
38             insets
39         }
40
41         textView = findViewById(R.id.textview)
42         btVar1 = findViewById(R.id.btVar1)
43
44         fusedLocationClient = LocationServices.getFusedLocationProviderClient(this)
45
46         btVar1.setOnClickListener {
47             checkForPermission()
48         }
49     }
50
51     private fun checkForPermission() {
52         if (ActivityCompat.checkSelfPermission(context, Manifest.permission.ACCESS_FINE_LOCATION) != PackageManager.PERMISSION_GRANTED &&
53             ActivityCompat.checkSelfPermission(context, Manifest.permission.ACCESS_COARSE_LOCATION) != PackageManager.PERMISSION_GRANTED) {
54             ActivityCompat.requestPermissions(this,
55                 arrayOf(Manifest.permission.ACCESS_FINE_LOCATION, Manifest.permission.ACCESS_COARSE_LOCATION),
56                 LOCATION_PERMISSION_REQUEST_CODE)
57         } else {
58             obtainLocation()
59         }
60     }
61 }
```

b.

```
63 override fun onRequestPermissionsResult(requestCode: Int, permissions: Array<out String>, grantResults: IntArray) {
64     super.onRequestPermissionsResult(requestCode, permissions, grantResults)
65     if (requestCode == LOCATION_PERMISSION_REQUEST_CODE) {
66         if (grantResults.isNotEmpty() && grantResults[0] == PackageManager.PERMISSION_GRANTED) {
67             obtainLocation()
68         } else {
69             Toast.makeText(context, text: "Разрешение отклонено", Toast.LENGTH_SHORT).show()
70         }
71     }
72 }
73
74 @SuppressWarnings("MissingPermission")
75 private fun obtainLocation() {
76     fusedLocationClient.lastLocation
77         .addOnSuccessListener { location: Location? ->
78             if (location != null) {
79                 val weatherUrl = "https://api.openweathermap.org/data/2.5/weather?lat=${location.latitude}&lon=${location.longitude}&units=metric&appid=$apiKey"
80                 getTemp(weatherUrl)
81             } else {
82                 Toast.makeText(context, text: "Не удалось получить местоположение", Toast.LENGTH_SHORT).show()
83             }
84         }
85     .addOnFailureListener {
86         Toast.makeText(context, text: "Не удалось получить местоположение", Toast.LENGTH_SHORT).show()
87     }
88 }
89
90 @SuppressWarnings("SetTextI18n")
91 private fun getTemp(url: String) {
92     val queue = Volley.newRequestQueue(context)
93
94     val stringReq = StringRequest(
95         Request.Method.GET, url, { response ->
96             val obj = JSONObject(response)
97             val main: JSONObject = obj.getJSONObject(name: "main")
98             val temperature = main.getString(name: "temp")
99             val humidity = main.getString(name: "humidity")
100             val city = obj.getString(name: "name")
101
102             textView.text = "Temperature °C, влажность ${humidity}% в $city"
```

с.

```
        textView.text = "$temperature °C, влажность ${humidity}% в $city"  
    },  
    { textView.text = "Ошибка!" }  
)  
queue.add(stringReq)  
}  
}
```

5. Работа приложения

