Java 应用实验

实验一

1. 通过 Visual Studio Code 创建一个 Spring Boot 的项目

2. 创建成功后，创建一个 APIController.java 文件

3. 输入如下命令

```
//create weather api

//return 1 to 50 even number
```

```java
//create weather api
@GetMapping("/weather/{city}")
public String getWeather(@PathVariable String city) {
    return "Weather in " + city + " is good";
}

//return 1 to 50 even number
@RequestMapping(value = "/even", method = RequestMethod.GET)
public String getEven() {
    StringBuilder sb = new StringBuilder();
    for (int i = 1; i <= 50; i++) {
        if (i % 2 == 0) {
            sb.append(i).append(str: ",");
        }
    }
    return sb.toString();
}
```

实验二

1. 通过 Visual Studio Code 创建一个 Java 项目

2. 创建成功后输入如下语句

```
    //create binary tree class and add nodes
```

```
    //create binary tree class and add nodes
public class BinaryTree{
    Node root;

    public BinaryTree(Node root){
        this.root = root;
    }
                              App.Node
    public void addNode(Node node){
        if(root == null){
            root = node;
        }else{
            root.addNode(node);
        }
    }

    public void printTree(){
        if(root != null){
            root.printNode();
        }
    }
}

public class Node{
    int data;
    Node left;
```

实验三

1. 输入以下命令

```
//create android listview in Kotlin
```

```kotlin
1   /*
2
3   create android listview in Kotlin
4
5   */
6
7   package com.example.listview
8
9   import android.os.Bundle
10  import android.widget.ArrayAdapter
11  import android.widget.ListView
12  import androidx.appcompat.app.AppCompatActivity
13
14  class MainActivity : AppCompatActivity() {
15      override fun onCreate(savedInstanceState: Bundle?) {
16          super.onCreate(savedInstanceState)
17          setContentView(R.layout.activity_main)
18
19          val listView = findViewById<ListView>(R.id.listView)
20          val list = mutableListOf<String>()
21
22          for (i in 0..20) {
23              list.add("Item $i")
24          }
25
26          val adapter = ArrayAdapter(this, android.R.layout.simple_list_item_1, list)
27          listView.adapter = adapter
28      }
29  }
```