# 使用ViewPager展示未来天气、底部圆点的...

### 一、完成的任务

- 1.使用ViewPager控件实现能够翻页的底部控件
- 2.自定义pageAdapter实现内容的填充
- 3.底部两个小圆点的制作方法
- 4.设置监听器,实现小圆点跟随ViewPager控件翻页而改变

### 二、实现的效果



图1 页面1-翻页之前

图2 页面2-翻页之后

# 三、具体代码实现

1.修改weather\_info.xml文件

在Relat iveLayout 布局下方加入另一个Relat iveLayout 布局,并定义ViewPager控件,距离底部40dip的距离。同时,在底部的40dip空间内定义另一个Relat iveLayout 布局,用以存放下方的小圆点提示信息。

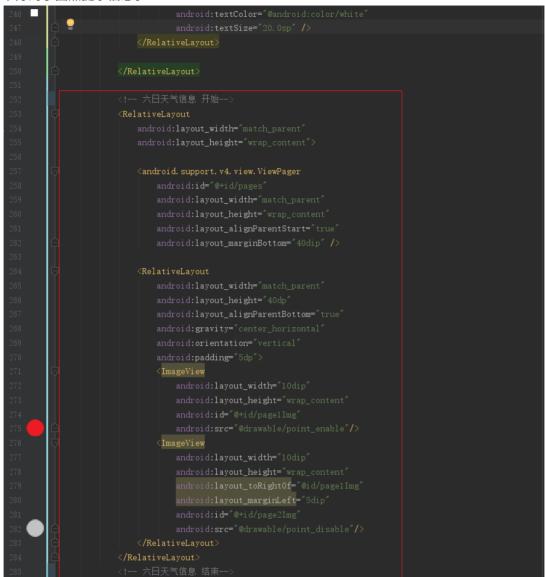


图3 在下方加上一个相对布局

## 2.新建pageAdapter类

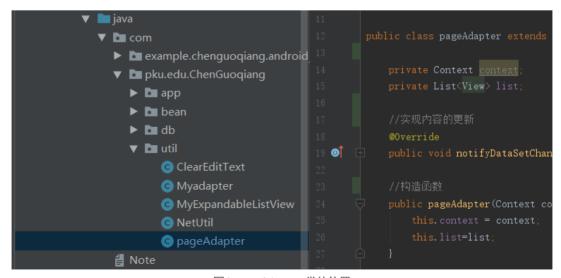


图4 pageAdapter类的位置

#### pageAdapter.java:

```
package com.pku.edu.ChenGuoqiang.util;
import android.content.Context;
import android.support.annotation.NonNull;
import android.support.v4.view.PagerAdapter;
import android.view.View;
import android.view.ViewGroup;
import java.util.List;
public class pageAdapter extends PagerAdapter {
    private Context context;
    private List<View> list;
    //实现内容的更新
    @Override
    public void notifyDataSetChanged() {
        super.notifyDataSetChanged();
    //构造函数
    public pageAdapter(Context context, List<View> list){
        this.context = context;
        this.list=list;
    }
    @Override
    public int getCount() {
        return list.size();
    }
    @Override
    public boolean isViewFromObject(@NonNull View view, @NonNull Object o)
        return view == o;
    }
    @Override
    public View instantiateItem(ViewGroup container, int position){
        View view = list.get(position);
        container.addView(view);
        return view;
    }
    @Override
```

```
public void destroyItem(ViewGroup container, int position, Object
  object){
    View view = (View)object;
    container.removeView(view);
}
}
```

### 3.修改TodayWeather.java文件

为TodayWeather.java文件添加第1~4天的天气信息与对应的Get、Set方法,注意,Get、Set方法与toString方法均由Android Studio自动生成。

#### TodayWeather.java:

```
package com.pku.edu.ChenGuoqiang.bean;
public class TodayWeather {
    private String city=null;
    private String updatetime=null;
    private String wendu=null;
    private String shidu=null;
    private String pm25="-1";
   private String quality=null;
    private String fengxiang=null;
    private String fengli=null;
    private String date=null;
    private String high=null;
    private String low=null;
    private String type=null;
    //未来第1天的天气
    private String tomorrow1_date;
    private String tomorrow1_high;
    private String tomorrow1_low;
    private String tomorrow1_type;
    private String tomorrow1_fengxiang;
    //未来第2天的天气
    private String tomorrow2_date;
    private String tomorrow2_high;
    private String tomorrow2_low;
    private String tomorrow2_type;
    private String tomorrow2_fengxiang;
    //未来第3天的天气
    private String tomorrow3_date;
    private String tomorrow3_high;
    private String tomorrow3_low;
    private String tomorrow3_type;
    private String tomorrow3_fengxiang;
```

```
//未来第4天的天气
private String tomorrow4_date;
private String tomorrow4_high;
private String tomorrow4_low;
private String tomorrow4_type;
private String tomorrow4_fengxiang;
public void setTomorrow1_date(String tomorrow1_date) {
    this.tomorrow1_date = tomorrow1_date;
}
public void setTomorrow1_high(String tomorrow1_high) {
   this.tomorrow1_high = tomorrow1_high;
}
public void setTomorrow1_low(String tomorrow1_low) {
    this.tomorrow1_low = tomorrow1_low;
}
public void setTomorrow1_type(String tomorrow1_type) {
    this.tomorrow1_type = tomorrow1_type;
}
public void setTomorrow1_fengxiang(String tomorrow1_fengxiang) {
    this.tomorrow1_fengxiang = tomorrow1_fengxiang;
}
public void setTomorrow2_date(String tomorrow2_date) {
    this.tomorrow2_date = tomorrow2_date;
public void setTomorrow2_high(String tomorrow2_high) {
    this.tomorrow2_high = tomorrow2_high;
}
public void setTomorrow2_low(String tomorrow2_low) {
    this.tomorrow2_low = tomorrow2_low;
}
public void setTomorrow2_type(String tomorrow2_type) {
    this.tomorrow2_type = tomorrow2_type;
}
public void setTomorrow2_fengxiang(String tomorrow2_fengxiang) {
    this.tomorrow2_fengxiang = tomorrow2_fengxiang;
}
public void setTomorrow3_date(String tomorrow3_date) {
    this.tomorrow3_date = tomorrow3_date;
```

```
public void setTomorrow3_high(String tomorrow3_high) {
    this.tomorrow3_high = tomorrow3_high;
}
public void setTomorrow3_low(String tomorrow3_low) {
    this.tomorrow3_low = tomorrow3_low;
}
public void setTomorrow3_type(String tomorrow3_type) {
    this.tomorrow3_type = tomorrow3_type;
}
public void setTomorrow3_fengxiang(String tomorrow3_fengxiang) {
    this.tomorrow3_fengxiang = tomorrow3_fengxiang;
}
public void setTomorrow4_date(String tomorrow4_date) {
    this.tomorrow4_date = tomorrow4_date;
}
public void setTomorrow4_high(String tomorrow4_high) {
    this.tomorrow4_high = tomorrow4_high;
}
public void setTomorrow4_low(String tomorrow4_low) {
    this.tomorrow4_low = tomorrow4_low;
}
public void setTomorrow4_type(String tomorrow4_type) {
    this.tomorrow4_type = tomorrow4_type;
}
public void setTomorrow4_fengxiang(String tomorrow4_fengxiang) {
    this.tomorrow4_fengxiang = tomorrow4_fengxiang;
}
public String getTomorrow1_date() {
    return tomorrow1_date;
}
public String getTomorrow1_high() {
    return tomorrow1_high;
}
public String getTomorrow1_low() {
    return tomorrow1_low;
public String getTomorrow1_type() {
    return tomorrow1_type;
```

```
public String getTomorrow1_fengxiang() {
    return tomorrow1_fengxiang;
}
public String getTomorrow2_date() {
    return tomorrow2_date;
}
public String getTomorrow2_high() {
    return tomorrow2_high;
}
public String getTomorrow2_low() {
    return tomorrow2_low;
}
public String getTomorrow2_type() {
    return tomorrow2_type;
}
public String getTomorrow2_fengxiang() {
    return tomorrow2_fengxiang;
}
public String getTomorrow3_date() {
    return tomorrow3_date;
}
public String getTomorrow3_high() {
    return tomorrow3_high;
}
public String getTomorrow3_low() {
    return tomorrow3_low;
}
public String getTomorrow3_type() {
    return tomorrow3_type;
}
public String getTomorrow3_fengxiang() {
    return tomorrow3_fengxiang;
public String getTomorrow4_date() {
   return tomorrow4_date;
}
public String getTomorrow4_high() {
```

```
return tomorrow4_high;
}
public String getTomorrow4_low() {
    return tomorrow4_low;
public String getTomorrow4_type() {
    return tomorrow4_type;
public String getTomorrow4_fengxiang() {
    return tomorrow4_fengxiang;
}
@Override
public String toString() {
    return "TodayWeather{" +
            "city="" + city + "\" +
            ", updatetime='" + updatetime + '\'' +
            ", wendu='" + wendu + '\'' +
            ", shidu='" + shidu + '\'' +
            ", pm25='" + pm25 + '\'' +
            ", quality='" + quality + '\'' +
            ", fengxiang='" + fengxiang + '\'' +
            ", fengli='" + fengli + '\'' +
            ", date='" + date + '\'' +
            ", high='" + high + '\'' +
            ", low='" + low + '\'' +
            ", type='" + type + '\'' +
            ", tomorrow1_date='" + tomorrow1_date + '\'' +
            ", tomorrow1_high='" + tomorrow1_high + '\'' +
            ", tomorrow1_low='" + tomorrow1_low + '\'' +
            ", tomorrow1_type='" + tomorrow1_type + '\'' +
            ", tomorrow1_fengxiang='" + tomorrow1_fengxiang + '\'' +
            ", tomorrow2_date='" + tomorrow2_date + '\'' +
            ", tomorrow2_high='" + tomorrow2_high + '\'' +
            ", tomorrow2_low='" + tomorrow2_low + '\'' +
            ", tomorrow2_type='" + tomorrow2_type + '\'' +
            ", tomorrow2_fengxiang='" + tomorrow2_fengxiang + '\'' +
            ", tomorrow3_date='" + tomorrow3_date + '\'' +
            ", tomorrow3_high='" + tomorrow3_high + '\'' +
            ", tomorrow3_low='" + tomorrow3_low + '\'' +
            ", tomorrow3_type='" + tomorrow3_type + '\'' +
            ", tomorrow3_fengxiang='" + tomorrow3_fengxiang + '\'' +
            ", tomorrow4_date='" + tomorrow4_date + '\'' +
            ", tomorrow4_high='" + tomorrow4_high + '\'' +
            ", tomorrow4_low='" + tomorrow4_low + '\'' +
            ", tomorrow4_type='" + tomorrow4_type + '\'' +
```

```
", tomorrow4_fengxiang='" + tomorrow4_fengxiang + '\'' +
            '}';
}
//set方法
public void setCity(String city) {
    this.city = city;
}
public void setUpdatetime(String updatetime) {
    this.updatetime = updatetime;
}
public void setWendu(String wendu) {
    this.wendu = wendu;
}
public void setShidu(String shidu) {
    this.shidu = shidu;
public void setPm25(String pm25) {
   this.pm25 = pm25;
}
public void setQuality(String quality) {
    this.quality = quality;
}
public void setFengxiang(String fengxiang) {
    this.fengxiang = fengxiang;
}
public void setFengli(String fengli) {
    this.fengli = fengli;
}
public void setDate(String date) {
   this.date = date;
}
public void setHigh(String high) {
    this.high = high;
}
public void setLow(String low) {
    this.low = low;
public void setType(String type) {
    this.type = type;
```

```
//get方法
public String getCity() {
   return city;
public String getUpdatetime() {
    return updatetime;
}
public String getWendu() {
    return wendu;
}
public String getShidu() {
   return shidu;
}
public String getPm25() {
    return pm25;
}
public String getQuality() {
    return quality;
}
public String getFengxiang() {
    return fengxiang;
}
public String getFengli() {
    return fengli;
}
public String getDate() {
   return date;
public String getHigh() {
    return high;
}
public String getLow() {
   return low;
}
public String getType() {
    return type;
}
```

### 4.新建page1.xml、page2.xml布局文件

page1.xml、page2.xml文件时ViewPager控件内第一页与第二页的内容信息,由于查询天气只返回了四天的天气信息,所以每一个page.xml文件中包含两天的天气。而由于page1.xml与page2.xml文件布局相似,仅仅是id命名不同,所以以下仅展示page1.xml的文件,使用了两个RelativeLayout控件分别代表两天的天气。

#### page1.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android: layout_width="match_parent"
   android: lavout height="match parent"
    android:orientation="vertical"
    <RelativeLayout
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:id="@+id/tomorrow1"
        android:layout_alignParentLeft="true"
        android:layout_centerInParent="true"
        android:layout_marginLeft="40dip">
        <ImageView</pre>
            android:id="@+id/weather_img1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_alignParentLeft="true"
            android:layout_below="@+id/climate1"
            android:src="@drawable/biz_plugin_weather_qing" />
        <TextView
            android: layout_width="wrap_content"
            android:layout_height="30dip"
            android:singleLine="true"
            android:id="@+id/date1"
            android:text="11月11日"
            android:textColor="@android:color/white"
            android:textSize="25sp"/>
        <TextView
            android:id="@+id/temperature1"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android: layout_below="@id/date1"
            android:layout_marginLeft="5dip"
            android:singleLine="true"
```

```
android:text="-2°C~7°C"
        android:textColor="@android:color/white"
        android:textSize="30.0sp" />
    <TextView
        android:id="@+id/fengxiang1"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android: layout_marginLeft="5dip"
        android:singleLine="true"
        android:layout_below="@id/temperature1"
        android:text="东南风"
        android:textColor="@android:color/white"
        android:textSize="25sp" />
   <TextView
        android:id="@+id/climate1"
        android: layout_width="wrap_content"
        android: layout_height="wrap_content"
        android:layout below="@id/fengxiang1"
        android:layout_marginLeft="5dip"
        android:singleLine="true"
        android:text="多云转晴"
        android:textColor="@android:color/white"
        android:textSize="30.0sp" />
</RelativeLayout>
<RelativeLayout
   android:layout_width="wrap_content"
    android:layout_height="wrap_content"
   android:id="@+id/tomorrow2"
   android:layout_alignParentRight="true"
   android:layout centerInParent="true"
   android:layout_marginRight="40dip">
   <ImageView</pre>
        android:id="@+id/weather_img2"
        android:layout_width="wrap_content"
        android: layout_height="wrap_content"
        android:layout alignParentLeft="true"
        android:layout_below="@+id/climate2"
        android:src="@drawable/biz plugin weather ging" />
    <TextView
        android: layout_width="wrap_content"
        android:layout_height="30dip"
        android:singleLine="true"
        android:id="@+id/date2"
        android:text="11月11日"
        android:textColor="@android:color/white"
```

```
android:textSize="25sp"/>
       <TextView
            android:id="@+id/temperature2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/date2"
            android:layout_marginLeft="5dip"
            android:singleLine="true"
            android:text="-2°C~7°C"
            android:textColor="@android:color/white"
            android:textSize="30.0sp" />
       <TextView
            android:id="@+id/fengxiang2"
            android:layout_width="wrap_content"
            android: layout_height="wrap_content"
            android:layout_marginLeft="5dip"
            android:singleLine="true"
            android:layout_below="@id/temperature2"
            android:text="东南风"
            android:textColor="@android:color/white"
            android:textSize="25sp" />
       <TextView
            android:id="@+id/climate2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_below="@id/fengxiang2"
            android:layout_marginLeft="5dip"
            android:singleLine="true"
            android:text="多云转晴"
            android:textColor="@android:color/white"
            android:textSize="30.0sp" />
    </RelativeLayout>
</RelativeLayout>
```

# 5.修改MainActivity.java文件

修改导入的包:

```
import android. os. Message;
import android. support. annotation. Nullable;
import android. support. v4. view. ViewPager;
import android. support. v4. widget. SwipeRefreshLayout;
import android. util.Log;
import android. view. LayoutInflater;
import android. view. View;
import android. widget. ImageView;
import android. widget. TextView;
import android. widget. Toast;

import com. pku. edu. ChenGuoqiang. bean. TodayWeather;
import com. pku. edu. ChenGuoqiang. util. NetUtil;
import com. pku. edu. ChenGuoqiang. app. MyApplication;
import com. pku. edu. ChenGuoqiang. util. pageAdapter;
```

图5 导入所需的包与自定义的适配器

#### 修改自定义的变量:

```
public class MainActivity extends Activity implements View. OnClickListener, ViewPager. OnPageChangeListener [

private static final int UPDATE_TODAY_WEATHER = 1;

private ImageView mUpdateBun.

private ImageView mcitySelect;

private TextView cityTv, timeTv, humidityTv, weekTv, pmDataTv, pmQualityTv, temperatureIv, climateTv, windTv, city_name_Tv;

private TextView date1, temperature1, fengxiang1, climate1, date2, temperature3, fengxiang3, climate2, date3, temperature4, fengxiang3, climate3, date4, temperature4, fengxiang3, climate3, date4, temperature4, fengxiang3, climate4;

private ImageView weatherImg, pmImg;

private ImageView weatherImg, weatherImg2, weatherImg3, weatherImg4;

private ImageView weatherImg1, weatherImg2, weatherImg3, weatherImg4;

private String updatedCityCode;

private ViewPager viewPager;
private List(View) views,
private pageAdapter pageadapter;
```

图6 定义ViewPager所需要的变量

修改void init View()函数,将上面定义的变量赋值。

置监听器,为接下来滑动页面改变小圆点做监听操作。

3.在最后需要设置适配器,并且,使用viewPager.setOnPageChangeListener(this)方法设

\_\_\_\_\_

#### void init View()函数:

```
//初始化界面
void initView() {
   updatedCityCode = "1010101000";
    city_name_Tv = (TextView) findViewById(R.id.title_city_name);
    cityTv = (TextView) findViewById(R.id.city);
   timeTv = (TextView) findViewById(R.id.time);
   humidityTv = (TextView) findViewById(R.id.humidity);
   weekTv = (TextView) findViewById(R.id.week_today);
    pmDataTv = (TextView) findViewById(R.id.pm data);
    pmQualityTv = (TextView) findViewById(R.id.pm2_5_quality);
    pmImg = (ImageView) findViewById(R.id.pm2_5_img);
    temperatureTv = (TextView) findViewById(R.id.temperature);
    climateTv = (TextView) findViewById(R.id.climate);
   windTv = (TextView) findViewById(R.id.wind);
   weatherImg = (ImageView) findViewById(R.id.weather_img);
    //-----设置ViewPager页面------
   viewPager = (ViewPager)findViewById(R.id.pages);
   View page1 = LayoutInflater.from(this).inflate(R.layout.page1,null);
   View page2 = LayoutInflater.from(this).inflate(R.layout.page2,null);
   views = new ArrayList<>();
    //findViewById, 注意要用R.id.XX
    date1 = (TextView) page1.findViewById(R.id.date1);
    temperature1 = (TextView)page1.findViewById(R.id.temperature1);
    fengxiang1 = (TextView)page1.findViewById(R.id.fengxiang1);
    climate1 = (TextView)page1.findViewById(R.id.climate1);
   weatherImg1 = (ImageView)page1.findViewById(R.id.weather_img1);
    date2 = (TextView) page1.findViewById(R.id.date2);
    temperature2 = (TextView)page1.findViewById(R.id.temperature2);
    fengxiang2 = (TextView)page1.findViewById(R.id.fengxiang2);
    climate2 = (TextView)page1.findViewById(R.id.climate2);
   weatherImg2 = (ImageView)page1.findViewById(R.id.weather_img2);
    date3 = (TextView) page2.findViewById(R.id.date1);
    temperature3 = (TextView)page2.findViewById(R.id.temperature1);
    fengxiang3 = (TextView)page2.findViewById(R.id.fengxiang1);
    climate3 = (TextView)page2.findViewById(R.id.climate1);
   weatherImg3 = (ImageView)page2.findViewById(R.id.weather_img1);
   date4 = (TextView) page2.findViewById(R.id.date2);
    temperature4 = (TextView)page2.findViewById(R.id.temperature2);
    fengxiang4 = (TextView)page2.findViewById(R.id.fengxiang2);
    climate4 = (TextView)page2.findViewById(R.id.climate2);
   weatherImg4 = (ImageView)page2.findViewById(R.id.weather_img2);
    //设置N/A
    date1.setText("N/A");
    temperature1.setText("N/A");
```

```
fengxiang1.setText("N/A");
climate1.setText("N/A"):
date2.setText("N/A");
temperature2.setText("N/A");
fengxiang2.setText("N/A");
climate2.setText("N/A");
date3.setText("N/A");
temperature3.setText("N/A");
fengxiang3.setText("N/A");
climate3.setText("N/A");
date4.setText("N/A");
temperature4.setText("N/A");
fengxiang4.setText("N/A");
climate4.setText("N/A");
//设置适配器
views.add(page1);
views.add(page2);
pageadapter = new pageAdapter(this, views);
viewPager.setAdapter(pageadapter);
page1Img = findViewById(R.id.page1Img);
page2Img = findViewById(R.id.page2Img);
viewPager.setOnPageChangeListener(this);
//-----设置ViewPager页面-------
city_name_Tv.setText("N/A");
cityTv.setText("N/A");
timeTv.setText("N/A");
humidityTv.setText("N/A");
pmDataTv.setText("N/A");
pmQualityTv.setText("N/A");
weekTv.setText("N/A");
temperatureTv.setText("N/A");
climateTv.setText("N/A");
windTv.setText("N/A");
```

修改updateTodayWeather函数,实现更新ViewPager内的文字内容与图片,代码中有很多重复的if…else是因为总共有四天的天气需要更新,特别是图片部分。具体的代码为:

void updateTodayWeather(Todaweather todaweather)函数:

```
//根据得到的数据更新界面

void updateTodayWeather(TodayWeather todayWeather) {
    int pmIntdata = Integer.parseInt(todayWeather.getPm25());
    city_name_Tv.setText(todayWeather.getCity() + "天气");
    MyApplication.cityname_global = todayWeather.getCity();
    cityTv.setText(todayWeather.getCity());
    timeTv.setText(todayWeather.getUpdatetime() + "发布");
    humidityTv.setText("湿度:" + todayWeather.getShidu());
    pmDataTv.setText(todayWeather.getPm25());
```

```
pmQualityTv.setText(todayWeather.getQuality());
   weekTv.setText(todayWeather.getDate());
    temperatureTv.setText(todayWeather.getHigh() + "~" +
todayWeather.getLow());
    climateTv.setText(todayWeather.getType());
   windTv.setText("风力:" + todayWeather.getFengli());
    date1.setText(todayWeather.getTomorrow1_date());
temperature1.setText(todayWeather.getTomorrow1 high()+"~"+todayWeather.get
Tomorrow1_low());
    fengxiang1.setText(todayWeather.getTomorrow1_fengxiang());
    climate1.setText(todayWeather.getTomorrow1 type());
    date2.setText(todayWeather.getTomorrow2_date());
temperature2.setText(todayWeather.getTomorrow2_high()+"~"+todayWeather.get
Tomorrow2 low());
    fengxiang2.setText(todayWeather.getTomorrow2_fengxiang());
    climate2.setText(todayWeather.getTomorrow2_type());
    date3.setText(todayWeather.getTomorrow3_date());
temperature3.setText(todayWeather.getTomorrow3_high()+"~"+todayWeather.get
Tomorrow3_low());
    fengxiang3.setText(todayWeather.getTomorrow3_fengxiang());
    climate3.setText(todayWeather.getTomorrow3_type());
    date4.setText(todayWeather.getTomorrow4_date());
temperature4.setText(todayWeather.getTomorrow4_high()+"~"+todayWeather.get
Tomorrow4 low());
    fengxiang4.setText(todayWeather.getTomorrow4_fengxiang());
   climate4.setText(todayWeather.getTomorrow4_type());
    pageadapter.notifyDataSetChanged();
    //-----更新ViewPager------
    if
(todayWeather.getTomorrow1_type().equals("晴"))weatherImg1.setImageResourc
e(R.drawable.biz_plugin_weather_ging);
    if (todayWeather.getTomorrow1_type().equals("暴
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_baoxue);
    if (todayWeather.getTomorrow1_type().equals("暴
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_baoyu);
    if (todayWeather.getTomorrow1_type().equals("大暴
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_dabaoyu);
    if (todayWeather.getTomorrow1_type().equals("大
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_daxue);
    if (todayWeather.getTomorrow1_type().equals("大
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_dayu);
```

```
if (todayWeather.getTomorrow1_type().equals("多
云"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_duoyun);
    if (todayWeather.getTomorrow1_type().equals("雷阵
雨"))weatherImg1.setImageResource(R.drawable.biz plugin weather leizhenyu)
;
    if (todayWeather.getTomorrow1_type().equals("雷阵雨冰
雹"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_leizhenyub
ingbao);
    if (todayWeather.getTomorrow1_type().equals("沙尘
暴"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_shachenbao
);
    if (todayWeather.getTomorrow1_type().equals("特大暴
雨"))weatherImg1.setImageResource(R.drawable.biz plugin weather tedabaoyu)
    if
(todayWeather.getTomorrow1_type().equals("雾"))weatherImg1.setImageResourc
e(R.drawable.biz plugin weather wu);
    if (todayWeather.getTomorrow1_type().equals("小
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_xiaoxue);
    if (todayWeather.getTomorrow1_type().equals("小
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_xiaoyu);
    if
(todayWeather.getTomorrow1_type().equals("阴"))weatherImg1.setImageResourc
e(R.drawable.biz_plugin_weather_yin);
    if (todayWeather.getTomorrow1_type().equals("雨夹
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_yujiaxue);
    if (todayWeather.getTomorrow1_type().equals("阵
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_zhenxue);
    if (todayWeather.getTomorrow1_type().equals("阵
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_zhenyu);
    if (todayWeather.getTomorrow1_type().equals("中
雪"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_zhongxue);
    if (todayWeather.getTomorrow1_type().equals("中
雨"))weatherImg1.setImageResource(R.drawable.biz_plugin_weather_zhongyu);
(todayWeather.getTomorrow2_type().equals("晴"))weatherImg2.setImageResourc
e(R.drawable.biz_plugin_weather_qing);
    if (todayWeather.getTomorrow2_type().equals("暴
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_baoxue);
    if (todayWeather.getTomorrow2_type().equals("暴
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_baoyu);
    if (todayWeather.getTomorrow2_type().equals("大暴
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_dabaoyu);
    if (todayWeather.getTomorrow2_type().equals("大
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_daxue);
    if (todayWeather.getTomorrow2_type().equals("大
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_dayu);
    if (todayWeather.getTomorrow2_type().equals("多
云"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_duoyun);
```

```
if (todayWeather.getTomorrow2_type().equals("雷阵
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_leizhenyu)
    if (todayWeather.getTomorrow2 type().equals("雷阵雨冰
雹"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_leizhenyub
ingbao):
    if (todayWeather.getTomorrow2_type().equals("沙尘
暴"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_shachenbao
);
    if (todayWeather.getTomorrow2_type().equals("特大暴
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_tedabaoyu)
;
(todayWeather.getTomorrow2_type().equals("雾"))weatherImg2.setImageResourc
e(R.drawable.biz_plugin_weather_wu);
    if (todayWeather.getTomorrow2_type().equals("小
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_xiaoxue);
    if (todayWeather.getTomorrow2_type().equals("小
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_xiaoyu);
(todayWeather.getTomorrow2_type().equals("阴"))weatherImg2.setImageResourc
e(R.drawable.biz plugin weather vin);
    if (todayWeather.getTomorrow2_type().equals("雨夹
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_yujiaxue);
    if (todayWeather.getTomorrow2_type().equals("阵
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_zhenxue);
    if (todayWeather.getTomorrow2_type().equals("阵
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_zhenyu);
    if (todayWeather.getTomorrow2_type().equals("中
雪"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_zhongxue);
    if (todayWeather.getTomorrow2_type().equals("中
雨"))weatherImg2.setImageResource(R.drawable.biz_plugin_weather_zhongyu);
    if
(todayWeather.getTomorrow3_type().equals("晴"))weatherImg3.setImageResourc
e(R.drawable.biz_plugin_weather_qing);
    if (todayWeather.getTomorrow3_type().equals("暴
雪"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_baoxue);
    if (todayWeather.getTomorrow3_type().equals("暴
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_baoyu);
    if (todayWeather.getTomorrow3_type().equals("大暴
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_dabaoyu);
    if (todayWeather.getTomorrow3_type().equals("大
雪"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_daxue);
    if (todayWeather.getTomorrow3_type().equals("大
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_dayu);
    if (todayWeather.getTomorrow3_type().equals("多
云"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_duoyun);
    if (todayWeather.getTomorrow3_type().equals("雷阵
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_leizhenyu)
```

```
if (todayWeather.getTomorrow3_type().equals("雷阵雨冰
雹"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_leizhenyub
ingbao);
   if (todayWeather.getTomorrow3_type().equals("沙尘
暴"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_shachenbao
);
    if (todayWeather.getTomorrow3_type().equals("特大暴
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_tedabaoyu)
    if
(todayWeather.getTomorrow3_type().equals("雰"))weatherImg3.setImageResourc
e(R.drawable.biz plugin weather wu);
    if (todayWeather.getTomorrow3_type().equals("小
雪"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_xiaoxue);
    if (todayWeather.getTomorrow3_type().equals("小
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_xiaoyu);
    if
(todayWeather.getTomorrow3_type().equals("PM"))weatherImg3.setImageResourc
e(R.drawable.biz_plugin_weather_yin);
    if (todayWeather.getTomorrow3_type().equals("雨夹
雪"))weatherImg3.setImageResource(R.drawable.biz plugin weather yujiaxue);
    if (todayWeather.getTomorrow3_type().equals("阵
雪"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_zhenxue);
    if (todayWeather.getTomorrow3_type().equals("阵
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_zhenyu);
    if (todayWeather.getTomorrow3_type().equals("中
雪"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_zhongxue);
    if (todayWeather.getTomorrow3_type().equals("中
雨"))weatherImg3.setImageResource(R.drawable.biz_plugin_weather_zhongyu);
    if
(todayWeather.getTomorrow4_type().equals("晴"))weatherImg4.setImageResourc
e(R.drawable.biz_plugin_weather_qing);
    if (todayWeather.getTomorrow4_type().equals("暴
雪"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_baoxue);
    if (todayWeather.getTomorrow4_type().equals("暴
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_baoyu);
    if (todayWeather.getTomorrow4_type().equals("大暴
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_dabaoyu);
    if (todayWeather.getTomorrow4_type().equals("大
雪"))weatherImg4.setImageResource(R.drawable.biz plugin weather daxue);
    if (todayWeather.getTomorrow4_type().equals("大
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_dayu);
    if (todayWeather.getTomorrow4_type().equals("多
云"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_duoyun);
    if (todayWeather.getTomorrow4_type().equals("雷阵
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_leizhenyu)
```

```
if (todayWeather.getTomorrow4_type().equals("雷阵雨冰
雹"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_leizhenyub
ingbao);
    if (todayWeather.getTomorrow4_type().equals("沙尘
暴"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_shachenbao
):
   if (todayWeather.getTomorrow4_type().equals("特大暴
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_tedabaoyu)
(todayWeather.getTomorrow4_type().equals("雾"))weatherImg4.setImageResourc
e(R.drawable.biz_plugin_weather_wu);
    if (todayWeather.getTomorrow4_type().equals("小
雪"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_xiaoxue);
    if (todayWeather.getTomorrow4_type().equals("小
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_xiaoyu);
(todayWeather.getTomorrow4_type().equals("閉"))weatherImg4.setImageResourc
e(R.drawable.biz_plugin_weather_yin);
    if (todayWeather.getTomorrow4_type().equals("雨夹
雪"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_yujiaxue);
    if (todayWeather.getTomorrow4_type().equals("阵
雪"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_zhenxue);
    if (todayWeather.getTomorrow4_type().equals("阵
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_zhenyu);
    if (todayWeather.getTomorrow4_type().equals("中
雪"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_zhongxue);
    if (todayWeather.getTomorrow4_type().equals("中
雨"))weatherImg4.setImageResource(R.drawable.biz_plugin_weather_zhongyu);
    //使用setImageResource方法更新Pm2.5图片与天气图片
    if
(pmIntdata<=50)pmImg.setImageResource(R.drawable.biz_plugin_weather_0_50);</pre>
(pmIntdata<=100)pmImg.setImageResource(R.drawable.biz_plugin_weather_51_10
0);
   else if
(pmIntdata<=150)pmImg.setImageResource(R.drawable.biz_plugin_weather_101_1
50);
   else if
(pmIntdata<=200)pmImg.setImageResource(R.drawable.biz_plugin_weather_151_2
00);
   else if
(pmIntdata<=300)pmImg.setImageResource(R.drawable.biz_plugin_weather_201_3
00);
    else
pmImg.setImageResource(R.drawable.biz_plugin_weather_greater_300);
```

```
//更新天气图片
    if
(todayWeather.getType().equals("晴"))weatherImg.setImageResource(R.drawabl
e.biz plugin weather ging);
    if (todayWeather.getType().equals("暴
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_baoxue);
    if (todayWeather.getType().equals("暴
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_baoyu);
    if (todayWeather.getType().equals("大暴
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_dabaoyu);
    if (todayWeather.getType().equals("大
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_daxue);
    if (todayWeather.getType().equals("大
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_dayu);
    if (todayWeather.getType().equals("多
云"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_duoyun);
    if (todayWeather.getType().equals("雷阵
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_leizhenyu);
    if (todayWeather.getType().equals("雷阵雨冰
雹"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_leizhenyubi
ngbao);
    if (todayWeather.getType().equals("沙尘
暴"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_shachenbao)
    if (todayWeather.getType().equals("特大暴
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_tedabaoyu);
(todayWeather.getType().equals("雾"))weatherImg.setImageResource(R.drawabl
e.biz_plugin_weather_wu);
    if (todayWeather.getType().equals("小
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_xiaoxue);
    if (todayWeather.getType().equals("小
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_xiaoyu);
(todayWeather.getType().equals("阴"))weatherImg.setImageResource(R.drawabl
e.biz_plugin_weather_yin);
    if (todayWeather.getType().equals("雨夹
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_yujiaxue);
    if (todayWeather.getType().equals("阵
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_zhenxue);
    if (todayWeather.getType().equals("阵
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_zhenyu);
    if (todayWeather.getType().equals("中
雪"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_zhongxue);
    if (todayWeather.getType().equals("中
雨"))weatherImg.setImageResource(R.drawable.biz_plugin_weather_zhongyu);
    Toast.makeText(MainActivity.this, "更新成功!",
Toast.LENGTH_SHORT).show();
```

同时,需要更新parseXML函数,因为需要解析未来第1-4天的XML,所以代码比较冗长,但是理解起来比较简单。

private TodayWeather parseXML(String xmldata)函数:

```
//解析HTML
private TodayWeather parseXML(String xmldata) {
   TodayWeather todayWeather = null;
   int fengxiangCount = 0;
   int fengliCount = 0;
   int dateCount = 0;
   int highCount = 0;
   int lowCount = 0;
   int typeCount = 0;
   try {
       XmlPullParserFactory fac = XmlPullParserFactory.newInstance();
       XmlPullParser xmlPullParser = fac.newPullParser();
       xmlPullParser.setInput(new StringReader(xmldata));
       int eventType = xmlPullParser.getEventType();
       Log.d("myWeather", "parseXML");
       while (eventType != XmlPullParser.END_DOCUMENT) {
            switch (eventType) {
                // 判断当前事件是否为文档开始事件
                case XmlPullParser.START_DOCUMENT:
                   break;
                // 判断当前事件是否为标签元素开始事件
                case XmlPullParser.START TAG:
                   if (xmlPullParser.getName().equals("resp")) {
                        todayWeather = new TodayWeather();
                   if (todayWeather != null) {
                        if (xmlPullParser.getName().equals("city")) {
                            eventType = xmlPullParser.next();
                            todayWeather.setCity(xmlPullParser.getText());
                        } else if
(xmlPullParser.getName().equals("updatetime")) {
                           eventType = xmlPullParser.next();
todayWeather.setUpdatetime(xmlPullParser.getText());
                       } else if
(xmlPullParser.getName().equals("shidu")) {
                           eventType = xmlPullParser.next();
todayWeather.setShidu(xmlPullParser.getText());
                        } else if
(xmlPullParser.getName().equals("wendu")) {
                           eventType = xmlPullParser.next();
todayWeather.setWendu(xmlPullParser.getText());
```

```
} else if (xmlPullParser.getName().equals("pm25"))
                            eventType = xmlPullParser.next();
                           todayWeather.setPm25(xmlPullParser.getText());
                        } else if
(xmlPullParser.getName().equals("quality")) {
                           eventType = xmlPullParser.next();
todayWeather.setQuality(xmlPullParser.getText());
                       } else if
(xmlPullParser.getName().equals("fengxiang") && fengxiangCount == 0) {
                           eventType = xmlPullParser.next();
todayWeather.setFengxiang(xmlPullParser.getText());
                            fengxiangCount++;
                       } else if
(xmlPullParser.getName().equals("fengli") && fengliCount == 0) {
                           eventType = xmlPullParser.next();
todayWeather.setFengli(xmlPullParser.getText());
                           fengliCount++;
                       } else if (xmlPullParser.getName().equals("date")
&& dateCount == 0) {
                            eventType = xmlPullParser.next();
                           todayWeather.setDate(xmlPullParser.getText());
                           dateCount++;
                        } else if (xmlPullParser.getName().equals("high")
&& highCount == 0) {
                           eventType = xmlPullParser.next();
todayWeather.setHigh(xmlPullParser.getText().substring(2).trim());
                           highCount++;
                       } else if (xmlPullParser.getName().equals("low")
&& lowCount == 0) {
                           eventType = xmlPullParser.next();
todayWeather.setLow(xmlPullParser.getText().substring(2).trim());
                           lowCount++;
                       } else if (xmlPullParser.getName().equals("type")
&& typeCount == 0) {
                           eventType = xmlPullParser.next();
                           todayWeather.setType(xmlPullParser.getText());
                            typeCount++;
                        }
                        //-----以下为更新解析第1-4天天气的代
                       else if (xmlPullParser.getName().equals("date") &&
dateCount == 1) {
                           eventType = xmlPullParser.next();
```

```
todayWeather.setTomorrow1_date(xmlPullParser.getText());
                            dateCount++;
                        } else if (xmlPullParser.getName().equals("high")
&& highCount == 1) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow1_high(xmlPullParser.getText().substring(2).trim()
);
                            highCount++;
                        } else if (xmlPullParser.getName().equals("low")
&& lowCount == 1) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow1_low(xmlPullParser.getText().substring(2).trim())
                            lowCount++;
                        } else if (xmlPullParser.getName().equals("type")
&& typeCount == 1) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow1_type(xmlPullParser.getText());
                            typeCount++;
                        }else if
(xmlPullParser.getName().equals("fengxiang") && fengxiangCount == 1) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow1_fengxiang(xmlPullParser.getText());
                            fengxiangCount++;
                        } else if (xmlPullParser.getName().equals("date")
&& dateCount == 2) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow2_date(xmlPullParser.getText());
                            dateCount++;
                        } else if (xmlPullParser.getName().equals("high")
&& highCount == 2) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow2_high(xmlPullParser.getText().substring(2).trim()
);
                            highCount++;
                        } else if (xmlPullParser.getName().equals("low")
&& lowCount == 2) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow2_low(xmlPullParser.getText().substring(2).trim())
                            lowCount++;
```

```
} else if (xmlPullParser.getName().equals("type")
&& typeCount == 2) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow2_type(xmlPullParser.getText());
                            typeCount++;
                        }else if
(xmlPullParser.getName().equals("fengxiang") && fengxiangCount == 2) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow2_fengxiang(xmlPullParser.getText());
                            fengxiangCount++;
                        } else if (xmlPullParser.getName().equals("date")
&& dateCount == 3) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow3_date(xmlPullParser.getText());
                            dateCount++;
                        } else if (xmlPullParser.getName().equals("high")
&& highCount == 3) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow3_high(xmlPullParser.getText().substring(2).trim()
);
                            highCount++;
                        } else if (xmlPullParser.getName().equals("low")
&& lowCount == 3) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow3_low(xmlPullParser.getText().substring(2).trim())
                            lowCount++;
                        } else if (xmlPullParser.getName().equals("type")
&& typeCount == 3) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow3_type(xmlPullParser.getText());
                            typeCount++;
                        }else if
(xmlPullParser.getName().equals("fengxiang") && fengxiangCount == 3) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow3_fengxiang(xmlPullParser.getText());
                            fengxiangCount++;
                        } else if (xmlPullParser.getName().equals("date")
&& dateCount == 4) {
                            eventType = xmlPullParser.next();
todayWeather.setTomorrow4_date(xmlPullParser.getText());
                            dateCount++;
```

```
} else if (xmlPullParser.getName().equals("high")
&& highCount == 4) {
                           eventType = xmlPullParser.next();
todayWeather.setTomorrow4_high(xmlPullParser.getText().substring(2).trim()
);
                           highCount++;
                       } else if (xmlPullParser.getName().equals("low")
&& lowCount == 4) {
                           eventType = xmlPullParser.next();
todayWeather.setTomorrow4_low(xmlPullParser.getText().substring(2).trim())
                           lowCount++;
                       } else if (xmlPullParser.getName().equals("type")
&& typeCount == 4) {
                           eventType = xmlPullParser.next();
todayWeather.setTomorrow4_type(xmlPullParser.getText());
                           typeCount++;
                       }else if
(xmlPullParser.getName().equals("fengxiang") && fengxiangCount == 4) {
                           eventType = xmlPullParser.next();
todayWeather.setTomorrow4_fengxiang(xmlPullParser.getText());
                           fengxiangCount++;
                       //----以上为更新解析第1-4天天气的代
                   }
                   break;
               // 判断当前事件是否为标签元素结束事件
               case XmlPullParser.END_TAG:
                   break;
           }
           // 进入下一个元素并触发相应事件
           eventType = xmlPullParser.next();
       }
   } catch (XmlPullParserException e) {
       e.printStackTrace();
   } catch (IOException e) {
       e.printStackTrace();
   return todayWeather;
```

最后,还需要创建更新底部导航小圆点,实现根据ViewPager的页面不同而更改小圆点的显示状态,重写接口定义的函数:

```
@Override
public void onPageScrolled(int i, float v, int i1) {
}
@Override
public void onPageSelected(int i) {
   if (i==0){
       //如果是第一页,设置第一个小圆点为红,第二个为灰色
       page1Img.setImageResource(R.drawable.point_enable);
       page2Img.setImageResource(R.drawable.point_disable);
   }else {
       //如果是第二页,设置第一个小圆点为灰,第二个为红色
       page1Img.setImageResource(R.drawable.point_disable);
       page2Img.setImageResource(R.drawable.point_enable);
   }
@Override
public void onPageScrollStateChanged(int i) {
}
```

# 四、小圆点的制作方法

由于没有自带的小圆点,所以为了制作底部的小圆点图片,我也尝试过很多方法,因为很多现有的软件不支持圆形裁剪图片,所以将经验分享如下:

第一步,打开windows系统自带的画图软件,在其中填充红色:

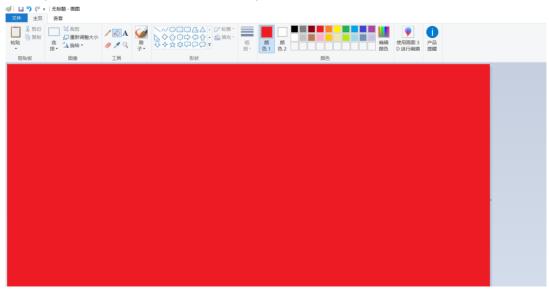


图7 系统自带的画图软件

第二步,新建一个PPT文件,打开并将刚才的图片粘贴入PPT,找到右上角的裁剪按钮:

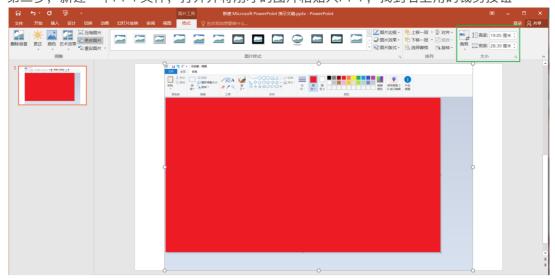


图8 PPT内的裁切按钮

第三步,在下拉选项中找到裁剪形状为椭圆,并调整纵横比为1: 1, 点击裁剪之后再另存即可

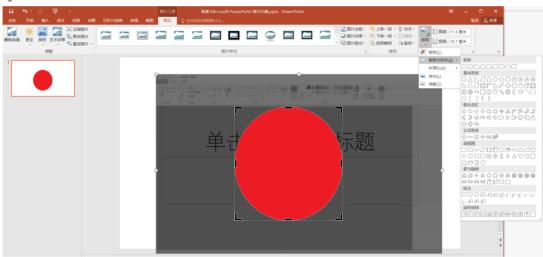


图9 裁剪之后的圆形