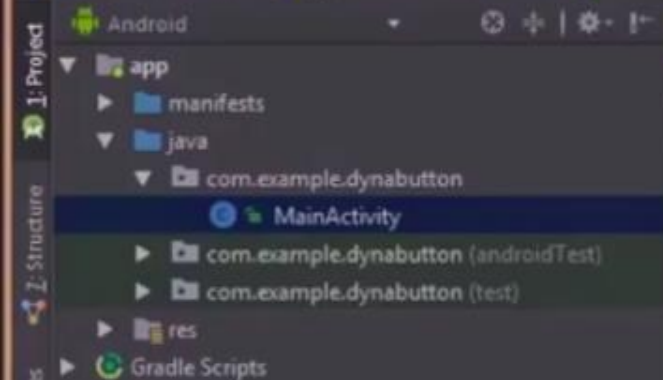


Add controls dynamically

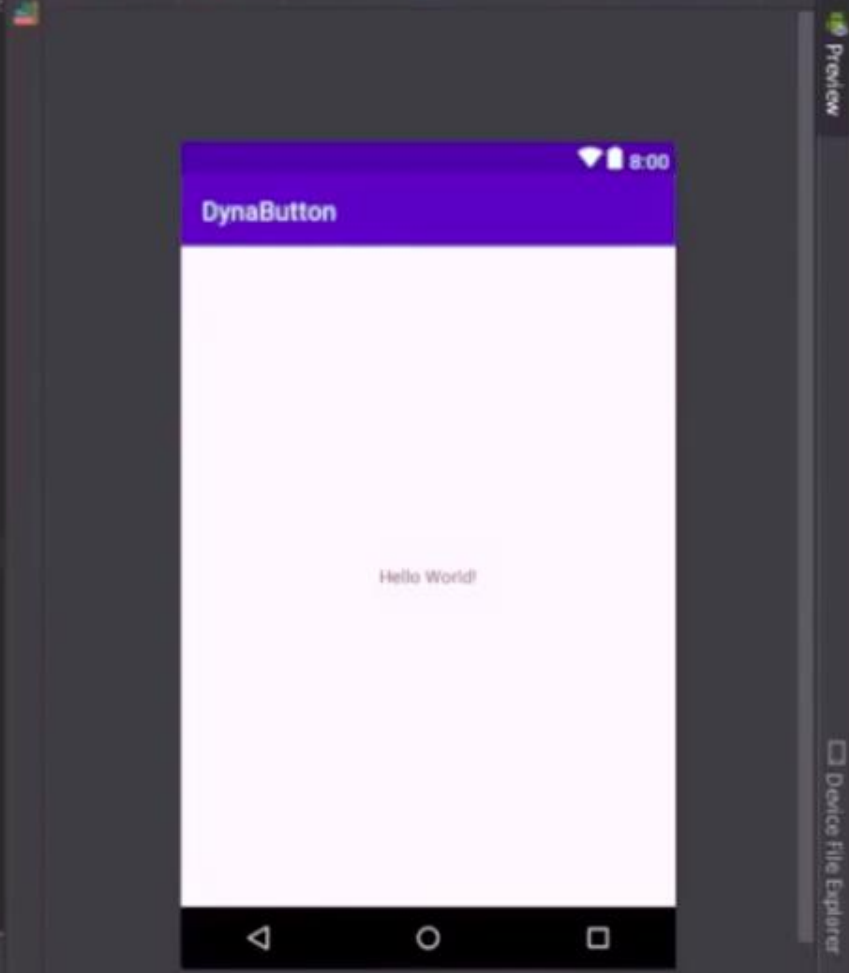
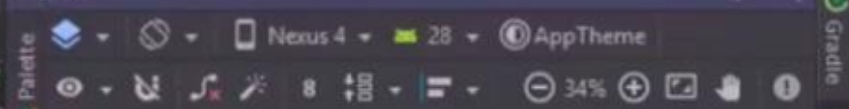
Dhanya N.M.



```
1 <?xml version="1.0" encoding="utf-8"?>
2 <android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     tools:context="com.example.dynabutton.MainActivity">
8
9     <TextView
10         android:layout_width="wrap_content"
11         android:layout_height="wrap_content"
12         android:text="Hello World!"
13         app:layout_constraintBottom_toBottomOf="parent"
14         app:layout_constraintLeft_toLeftOf="parent"
15         app:layout_constraintRight_toRightOf="parent"
16         app:layout_constraintTop_toTopOf="parent" />
17
18 </android.support.constraint.ConstraintLayout>
19
```

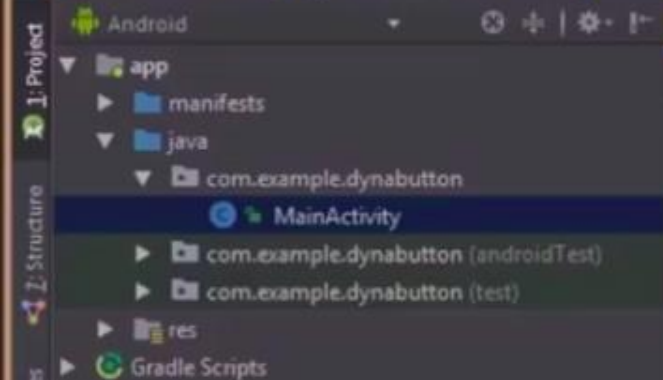
Design Text

Preview



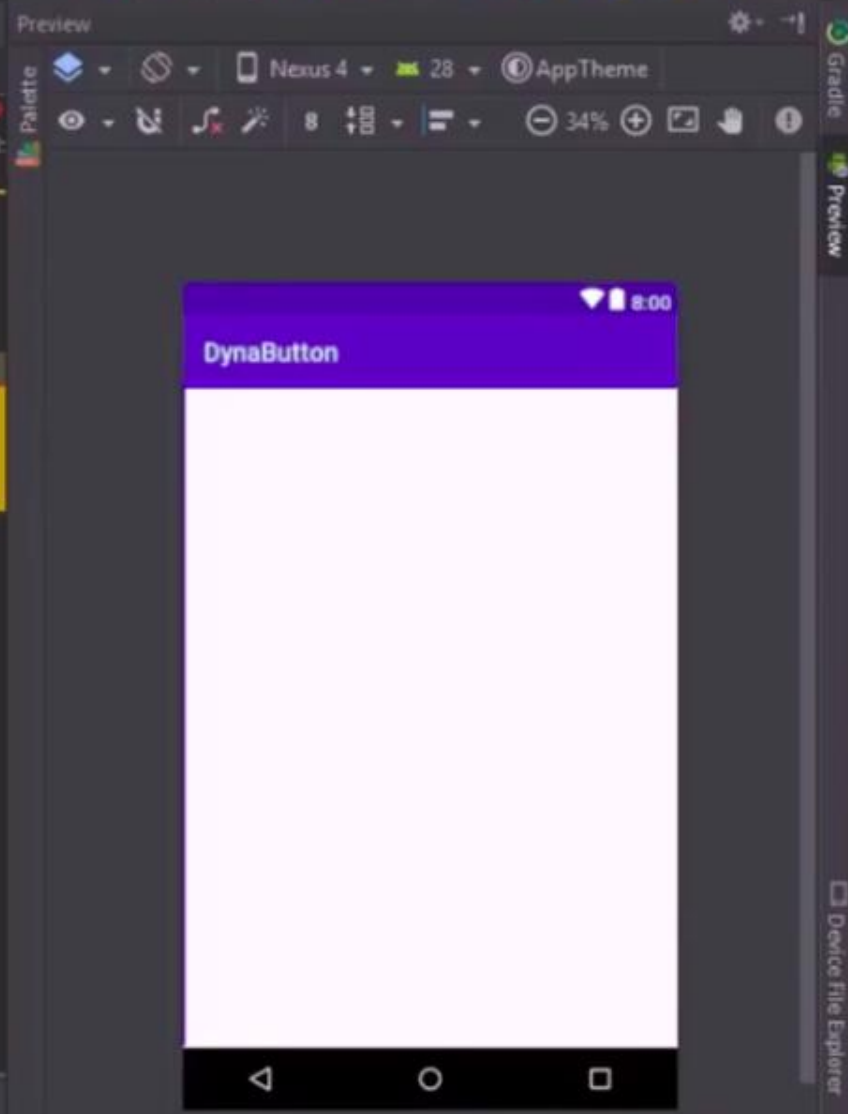
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Dynamic Button app src main res layout activity_main.xml



activity_main.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   tools:context="com.example.dynabutton.MainActivity">
8
9   <LinearLayout
10     android:layout_width="match_parent"
11     android:layout_height="match_parent"
12     android:id="@+id/rootlayout"
13   >
14
15 </android.support.constraint.ConstraintLayout>
```

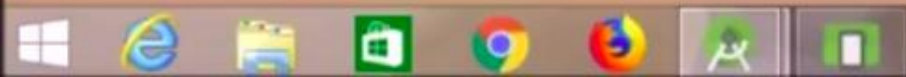


Terminal Logcat Android Profiler Messages Run TODO

XML tag has empty body

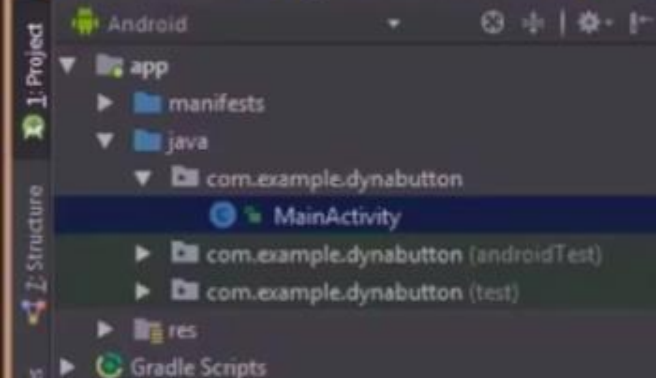
Event Log Gradle Console

13:6 CRLF: UTF-8 Context: <no context>



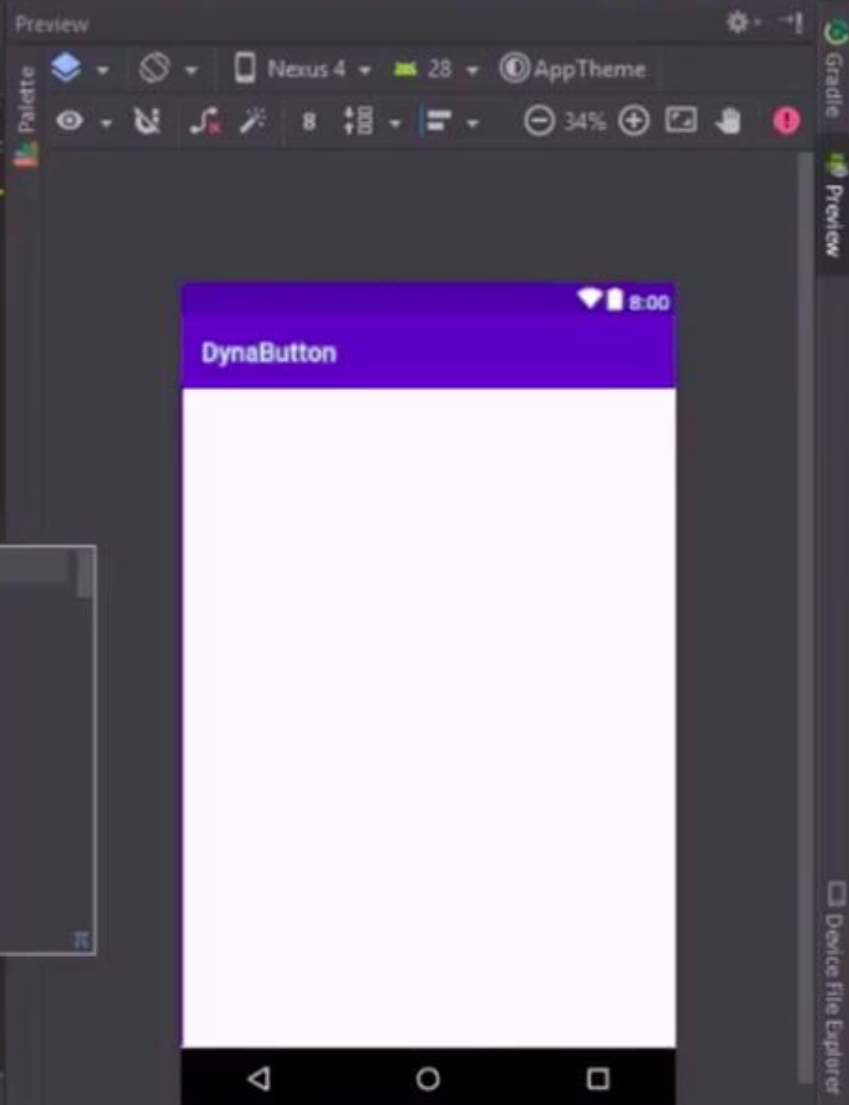
File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Dynamic Button app src main res layout activity_main.xml



```
activity_main.xml x MainActivity.java x
android.support.constraint.ConstraintLayout LinearLayout
1 <?xml version="1.0" encoding="utf-8"?>
2 <android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   tools:context="com.example.dynabutton.MainActivity">
8
9   <LinearLayout
10     android:layout_width="match_parent"
11     android:layout_height="match_parent"
12     android:id="@+id/rootlayout"
13     android:orientation="vertical">
14
15   </LinearLayout>
16   <Button
17     android:layout_width="match_parent"
18     android:layout_height="match_parent"
19     android:id="@+id/button"
20     android:orientation="vertical">
```

LinearLayout
Button
TextView
ListView
EditText
ImageView
RelativeLayout
WebView
AdapterViewFlipper
AutoCompleteTextView
Press Ctrl+Space to view tags from other namespaces

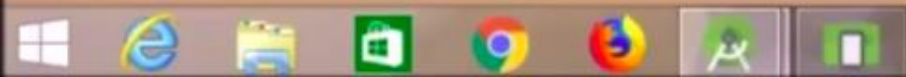


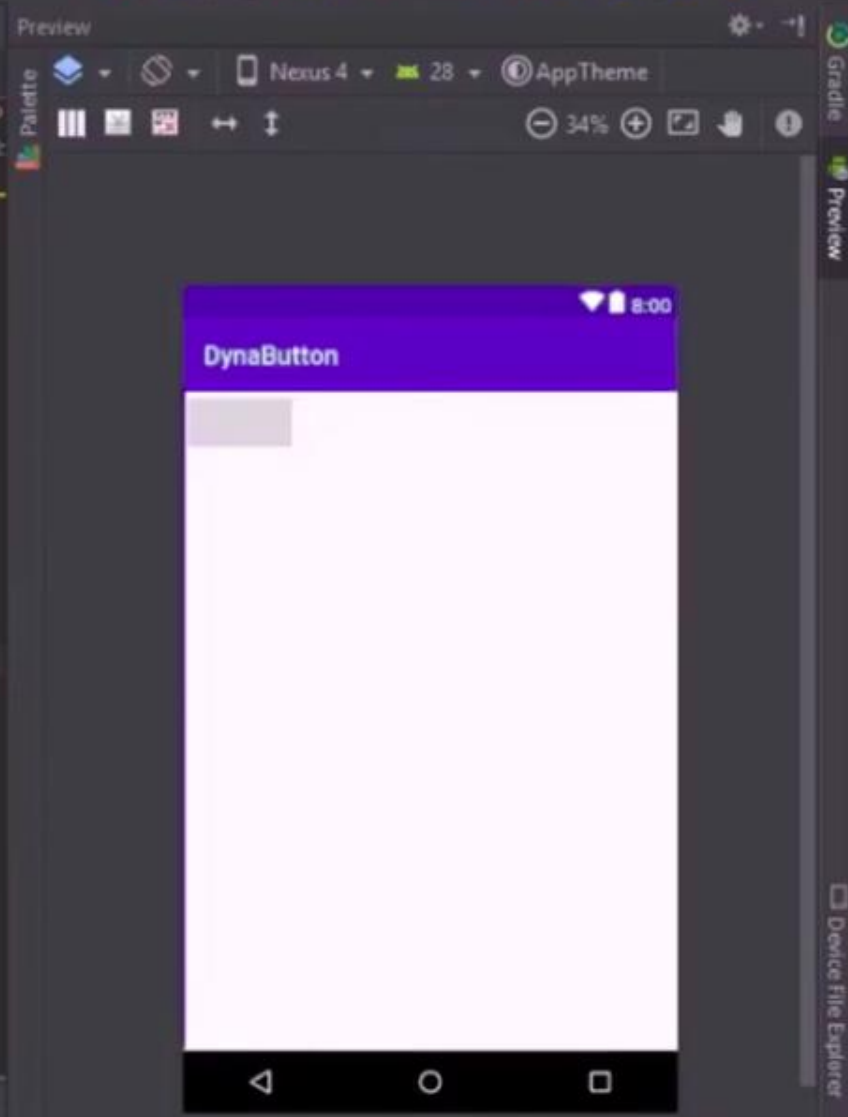
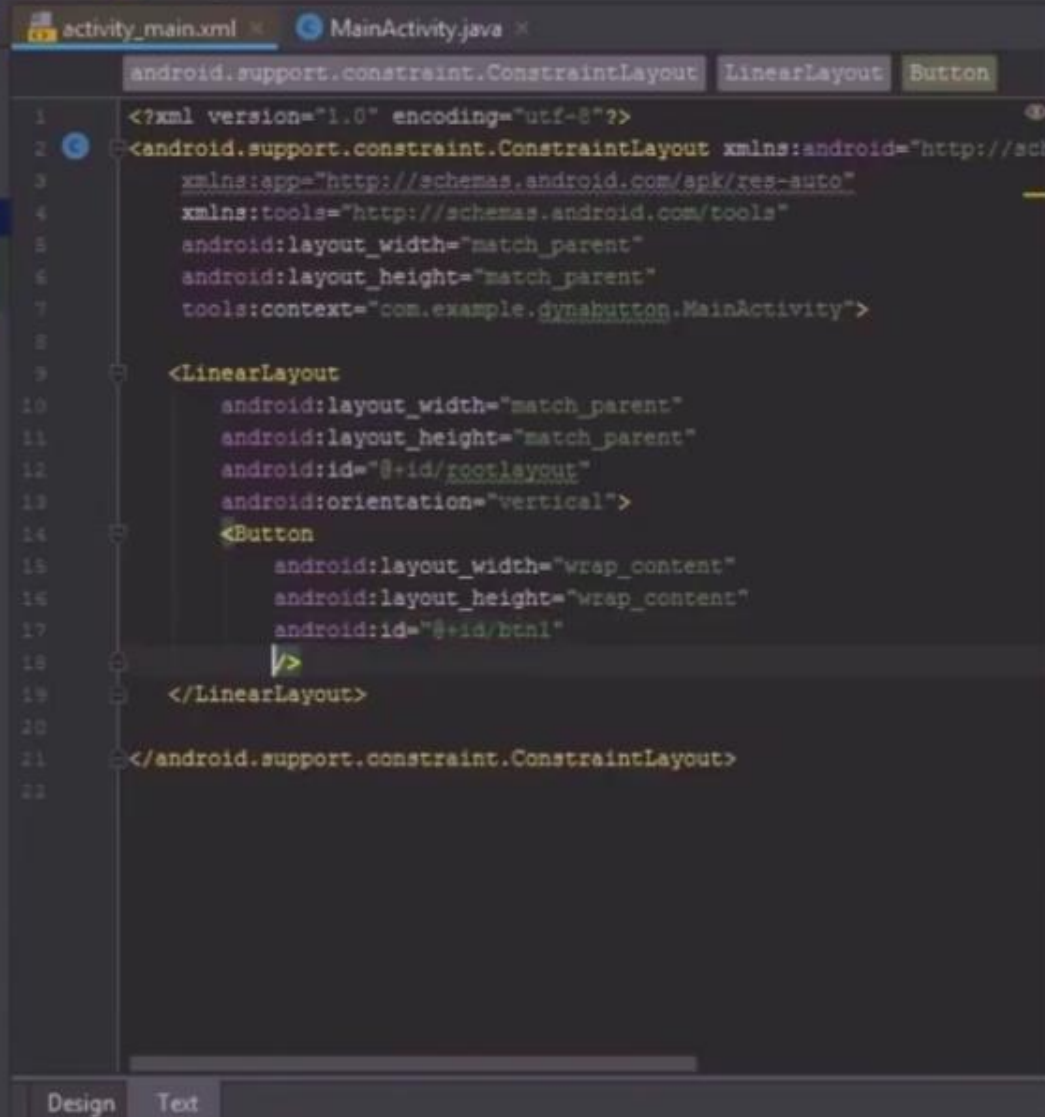
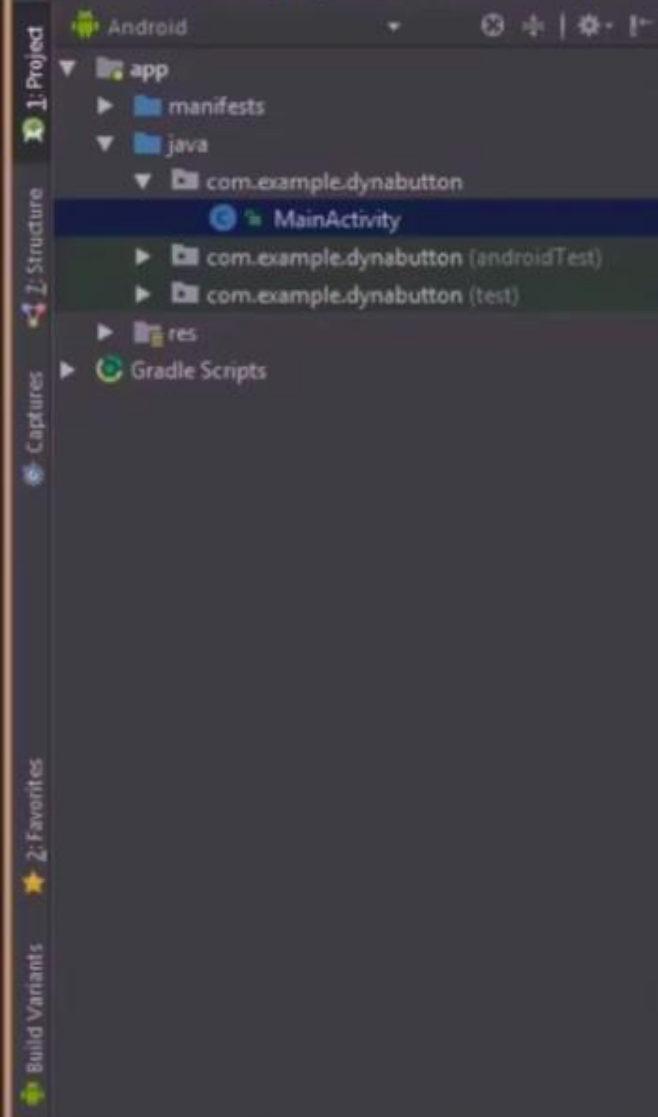
Terminal Logcat Android Profiler Messages Run TODO

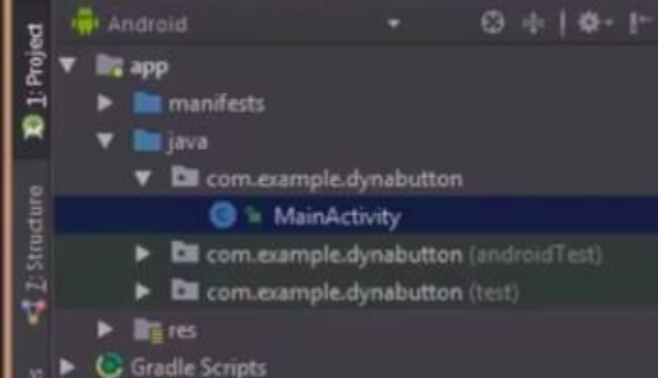
Instant Run performed a full build and install since the installation on the device does not match the local build on disk. // (Don't show again) (a minute ago)

Event Log Gradle Console

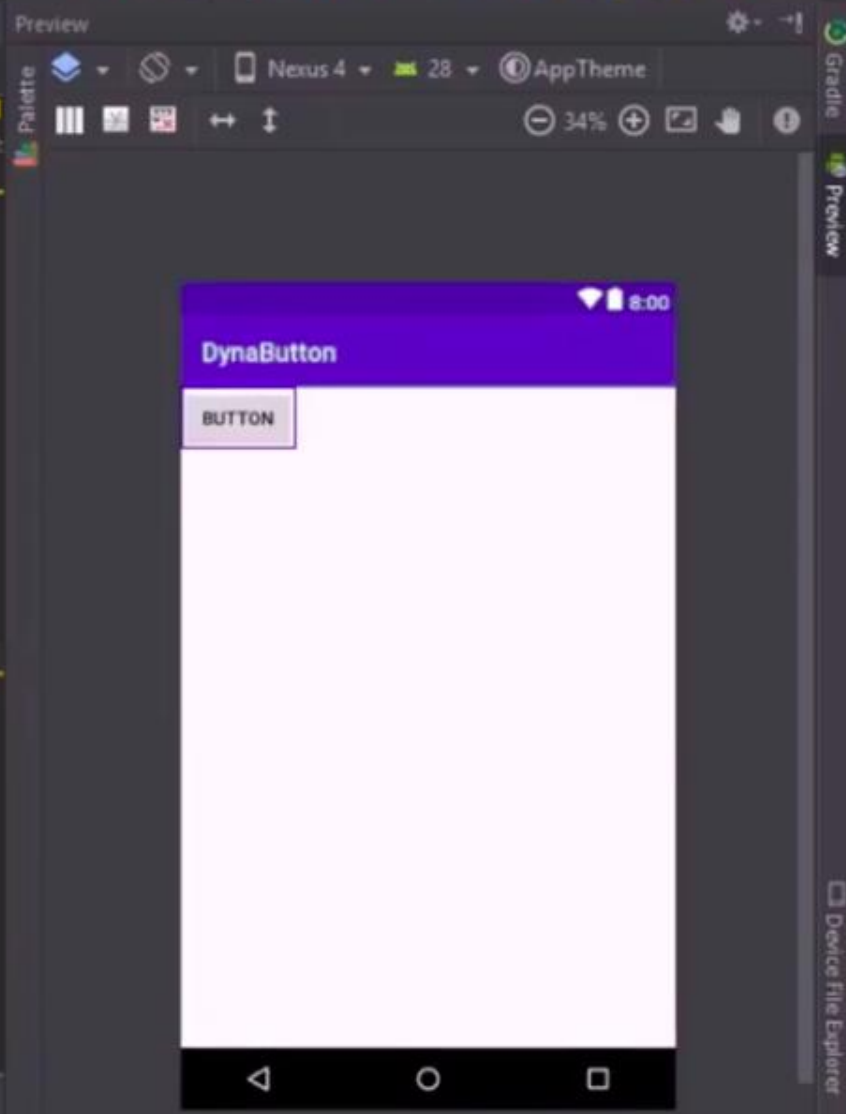
14:9 CRLF: UTF-8 Context: <no context>

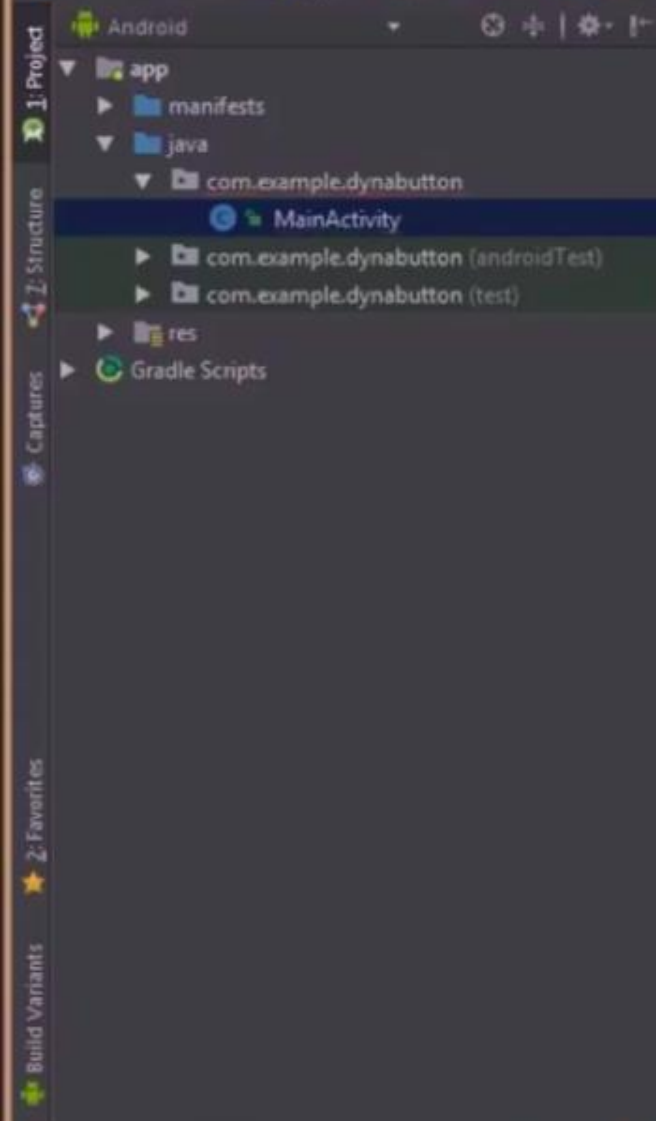




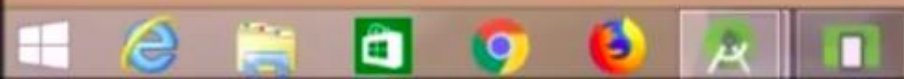


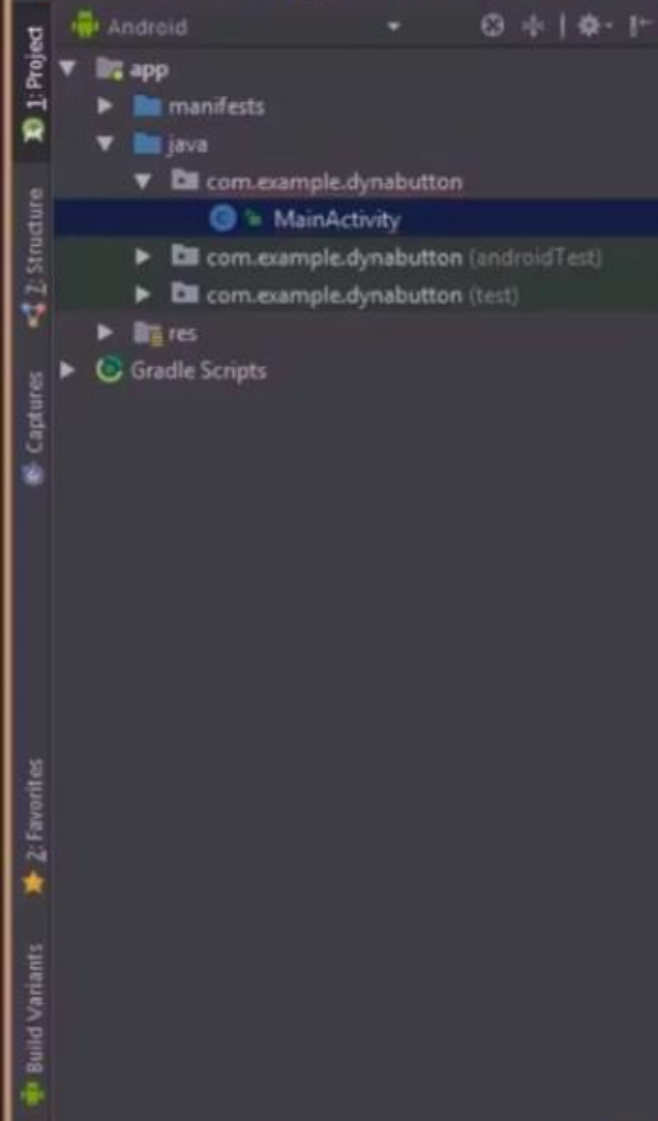
```
android.support.constraint.ConstraintLayout LinearLayout Button
1 <?xml version="1.0" encoding="utf-8"?>
2 <android.support.constraint.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res-auto"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   tools:context="com.example.dynabutton.MainActivity">
8
9   <LinearLayout
10     android:layout_width="match_parent"
11     android:layout_height="match_parent"
12     android:id="@+id/rootlayout"
13     android:orientation="vertical">
14     <Button
15       android:layout_width="wrap_content"
16       android:layout_height="wrap_content"
17       android:id="@+id/btn1"
18       android:text="Button"/>
19   </LinearLayout>
20
21 </android.support.constraint.ConstraintLayout>
22
```





```
MainActivity onCreate()
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.html);
12    }
13 }
14
15
16
```



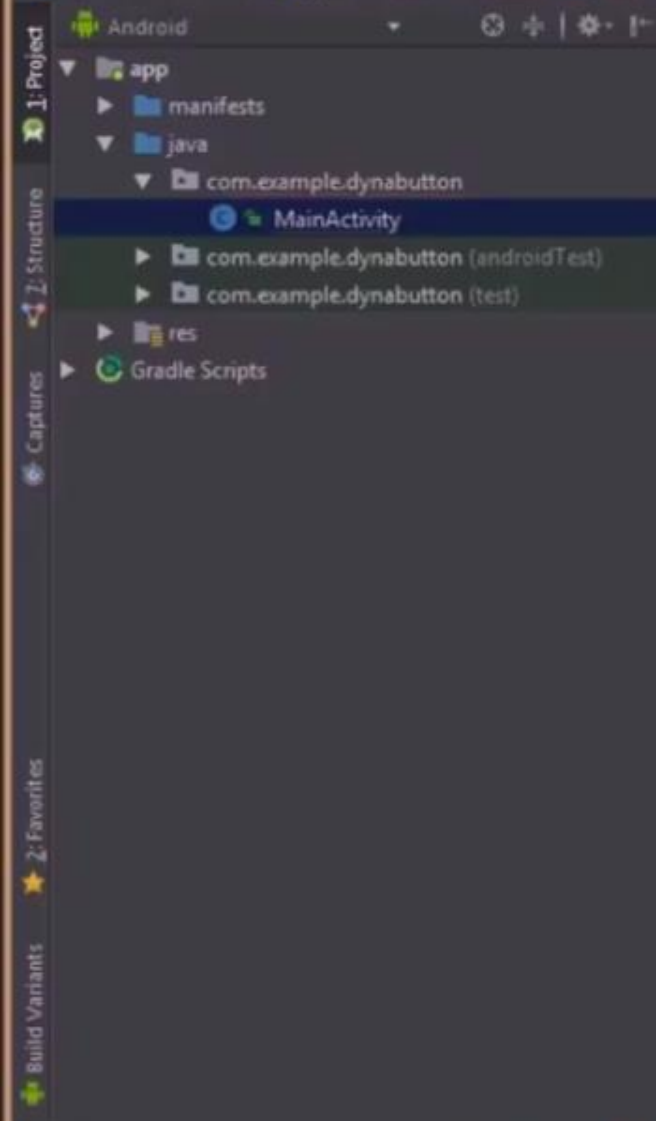


activity_main.xml x MainActivity.java

MainActivity onCreate() new OnClickListener onClick()

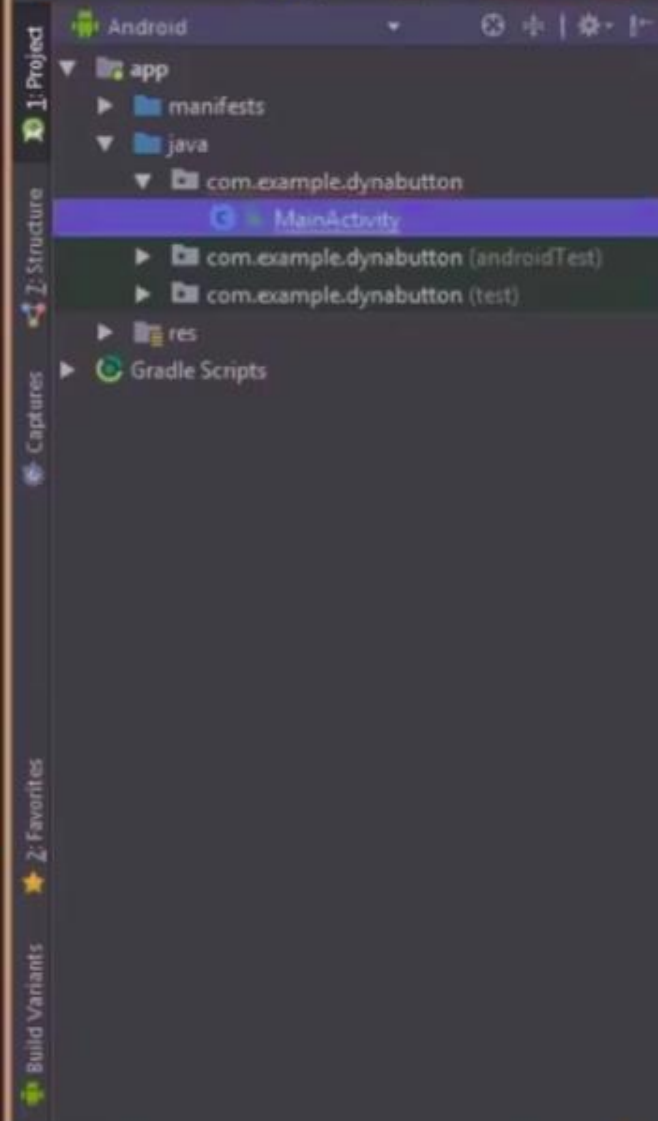
```
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15
16            }
17        });
18    }
19 }
```



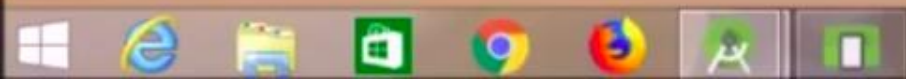


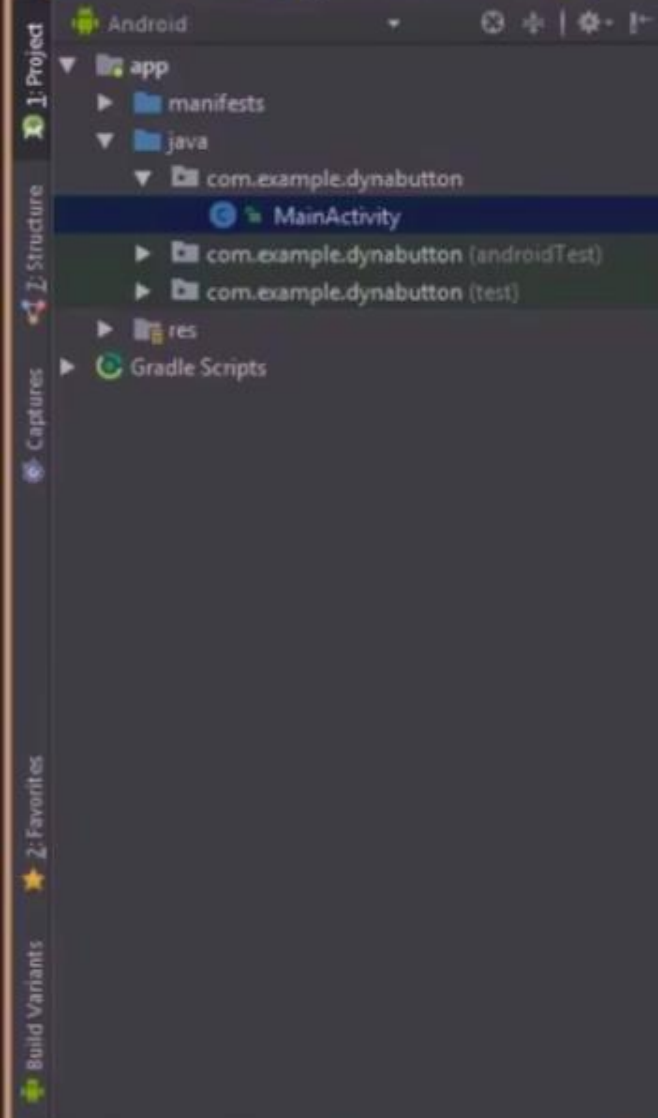
```
MainActivity
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addButton();
16            }
17        });
18    }
19 }
20
21
22
23 }
```



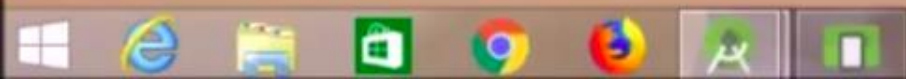


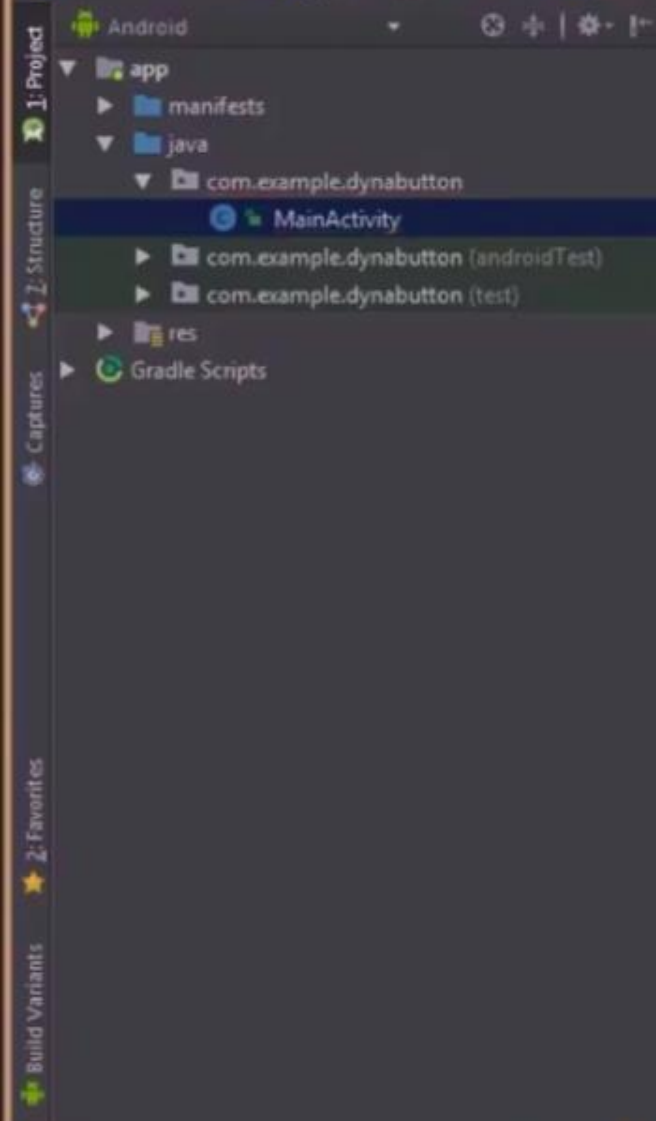
```
MainActivity addbutton()
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addbutton();
16            }
17        });
18    }
19
20    public void addbutton() {
21
22    }
23
24 }
25
26 }
```



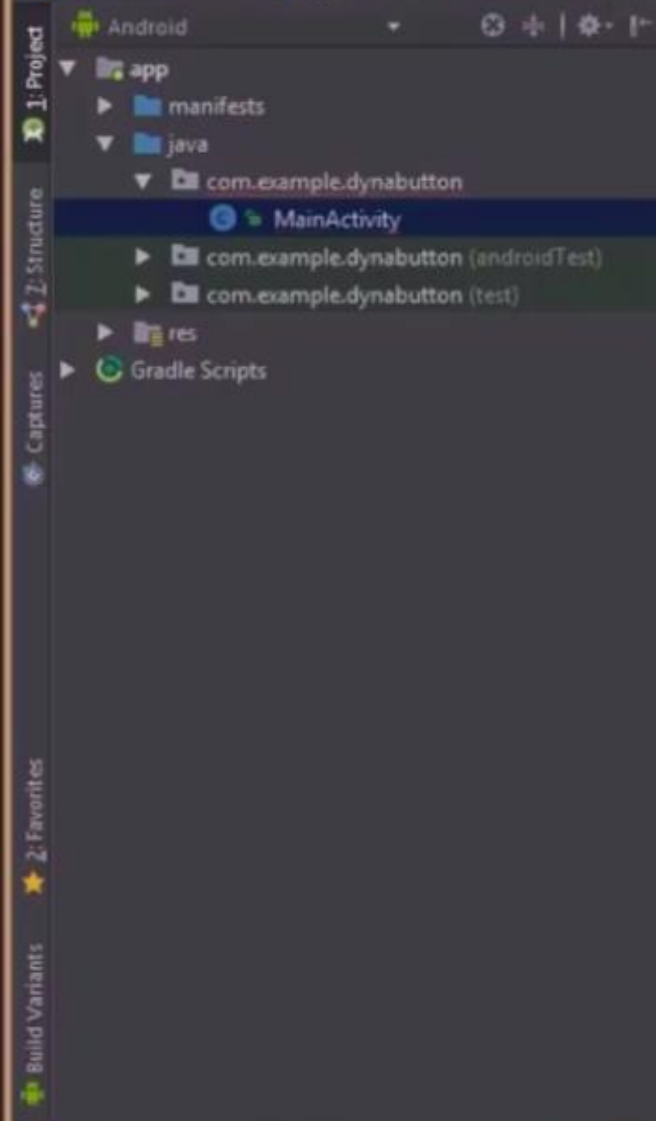


```
MainActivity addButton()
1 package com.example.dynabutton;
2
3 import ...
4
5
6
7
8 public class MainActivity extends AppCompatActivity {
9
10     @Override
11     protected void onCreate(Bundle savedInstanceState) {
12         super.onCreate(savedInstanceState);
13         setContentView(R.layout.activity_main);
14         Button btn = (Button) findViewById(R.id.btn1);
15         btn.setOnClickListener(new View.OnClickListener() {
16             @Override
17             public void onClick(View v) {
18                 addButton();
19             }
20         });
21     }
22     public void addButton(){
23
24     }
25 }
26 }
```

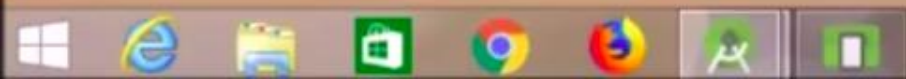


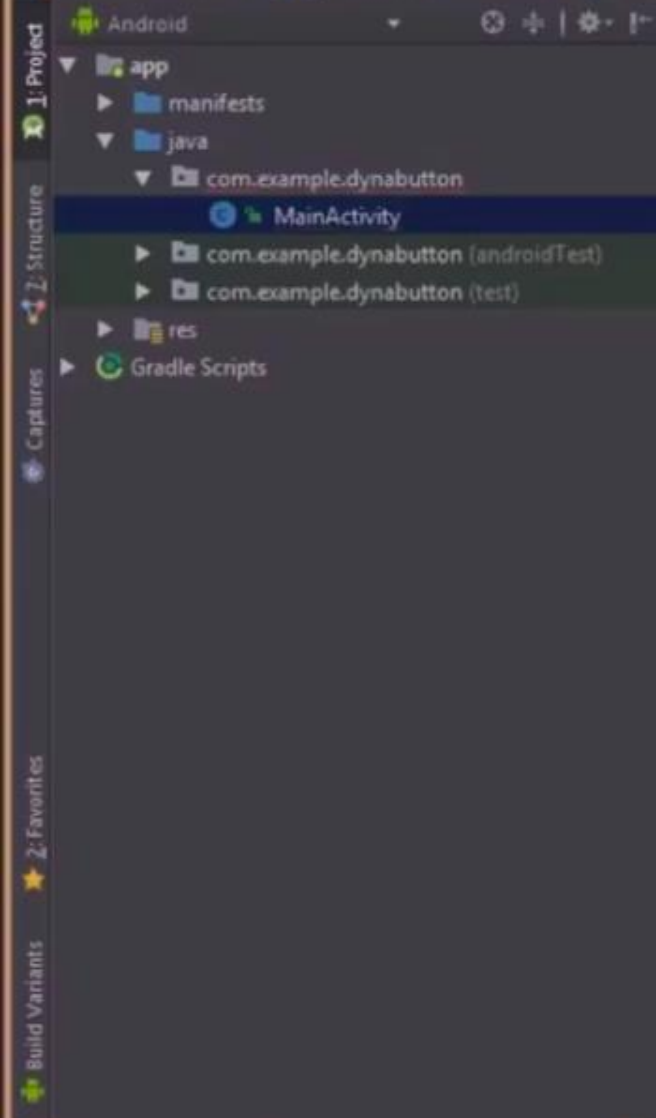


```
MainActivity addButton()  
1 package com.example.dynabutton;  
2  
3 import ...  
4  
5 public class MainActivity extends AppCompatActivity {  
6  
7     @Override  
8     protected void onCreate(Bundle savedInstanceState) {  
9         super.onCreate(savedInstanceState);  
10        setContentView(R.layout.activity_main);  
11        Button btn = (Button) findViewById(R.id.btn1);  
12        btn.setOnClickListener(new View.OnClickListener() {  
13            @Override  
14            public void onClick(View v) {  
15                addButton();  
16            }  
17        });  
18    }  
19  
20    public void addButton(){  
21        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);  
22    }  
23  
24 }  
25  
26  
27
```

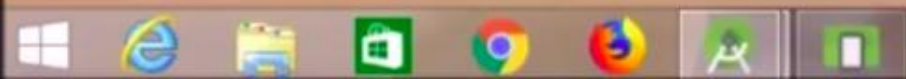



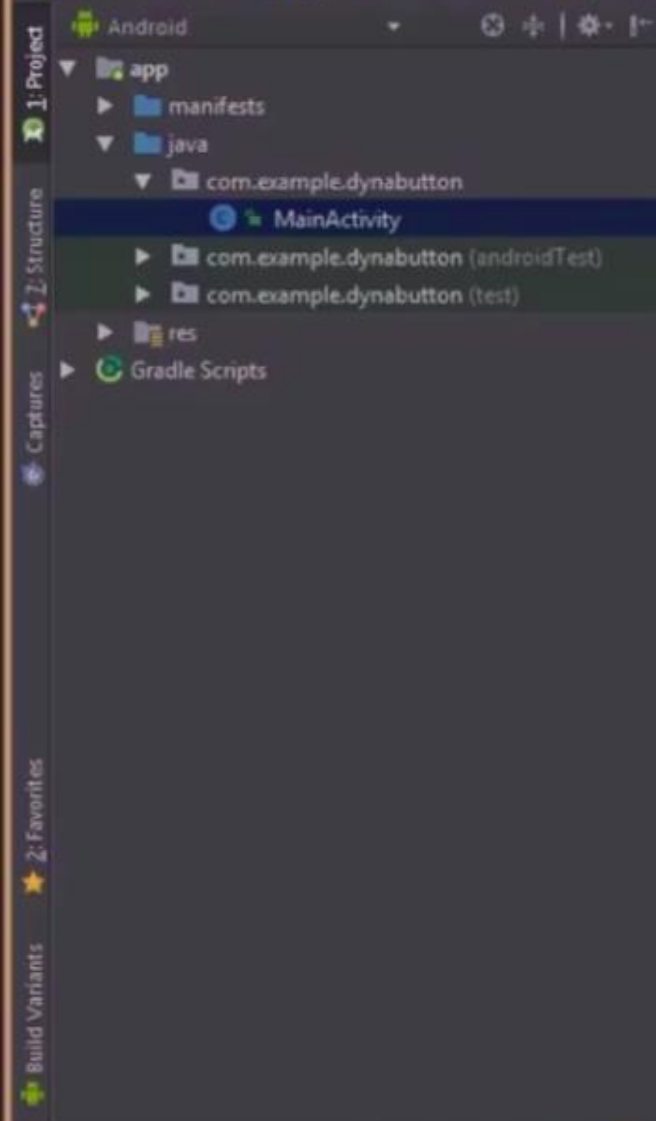
```
MainActivity
1 package com.example.dynabutton:
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     Button btn;
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addButton();
16            }
17        });
18    }
19    public void addButton(){
20        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);
21    }
22 }
23
24
25
26
27
28 }
```



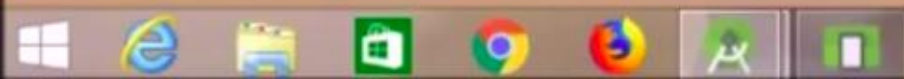


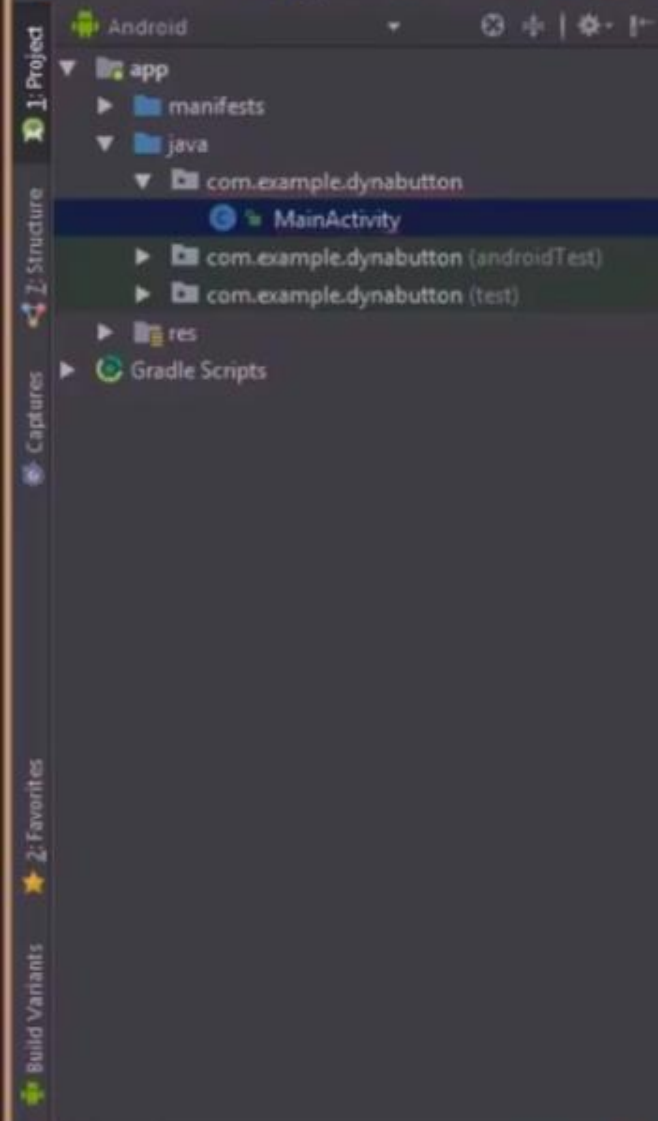
```
MainActivity addButton()  
1 package com.example.dynabutton;  
2  
3 import ...  
4  
5  
6  
7  
8  
9 public class MainActivity extends AppCompatActivity {  
10     Button newbtn;  
11     @Override  
12     protected void onCreate(Bundle savedInstanceState) {  
13         super.onCreate(savedInstanceState);  
14         setContentView(R.layout.activity_main);  
15         Button btn = (Button) findViewById(R.id.btn1);  
16         btn.setOnClickListener(new View.OnClickListener() {  
17             @Override  
18             public void onClick(View v) {  
19                 addButton();  
20             }  
21         });  
22     }  
23     public void addButton(){  
24         LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);  
25         newbtn = new Button(context: this);  
26     }  
27 }  
28
```



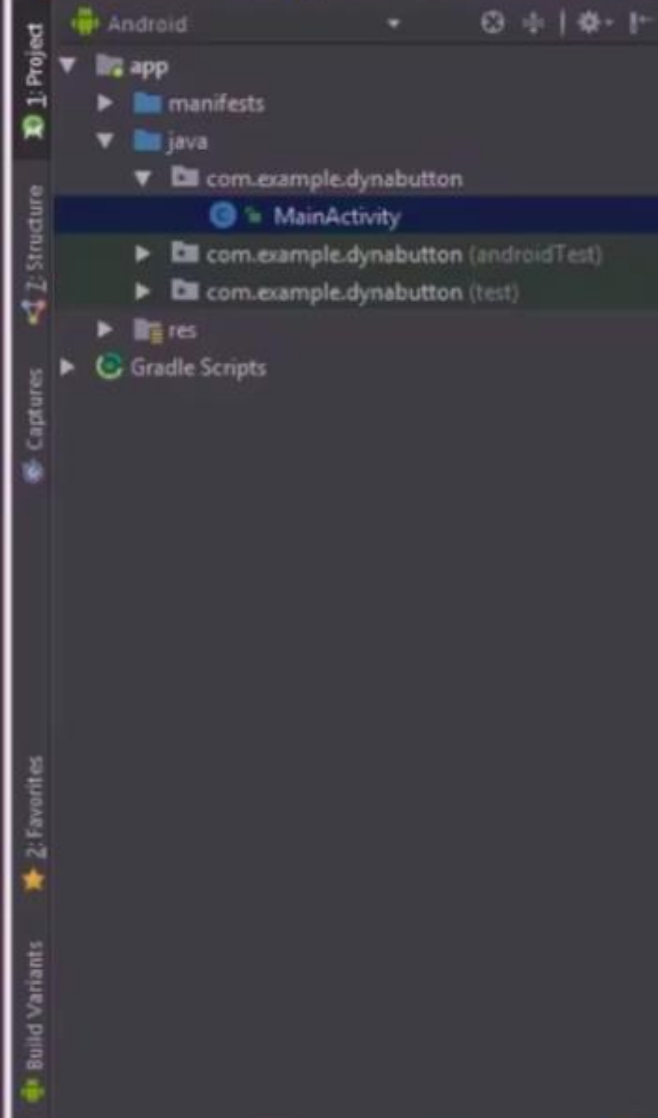


```
MainActivity addButton()
1 package com.example.dynabutton;
2
3 import ...
4
5
6
7
8
9 public class MainActivity extends AppCompatActivity {
10     Button newbtn;
11     @Override
12     protected void onCreate(Bundle savedInstanceState) {
13         super.onCreate(savedInstanceState);
14         setContentView(R.layout.activity_main);
15         Button btn = (Button) findViewById(R.id.btn1);
16         btn.setOnClickListener(new View.OnClickListener() {
17             @Override
18             public void onClick(View v) {
19                 addButton();
20             }
21         });
22     }
23     public void addButton(){
24         LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);
25         newbtn = new Button(context.this);
26         newbtn.setText("new button");
27     }
28 }
29
```

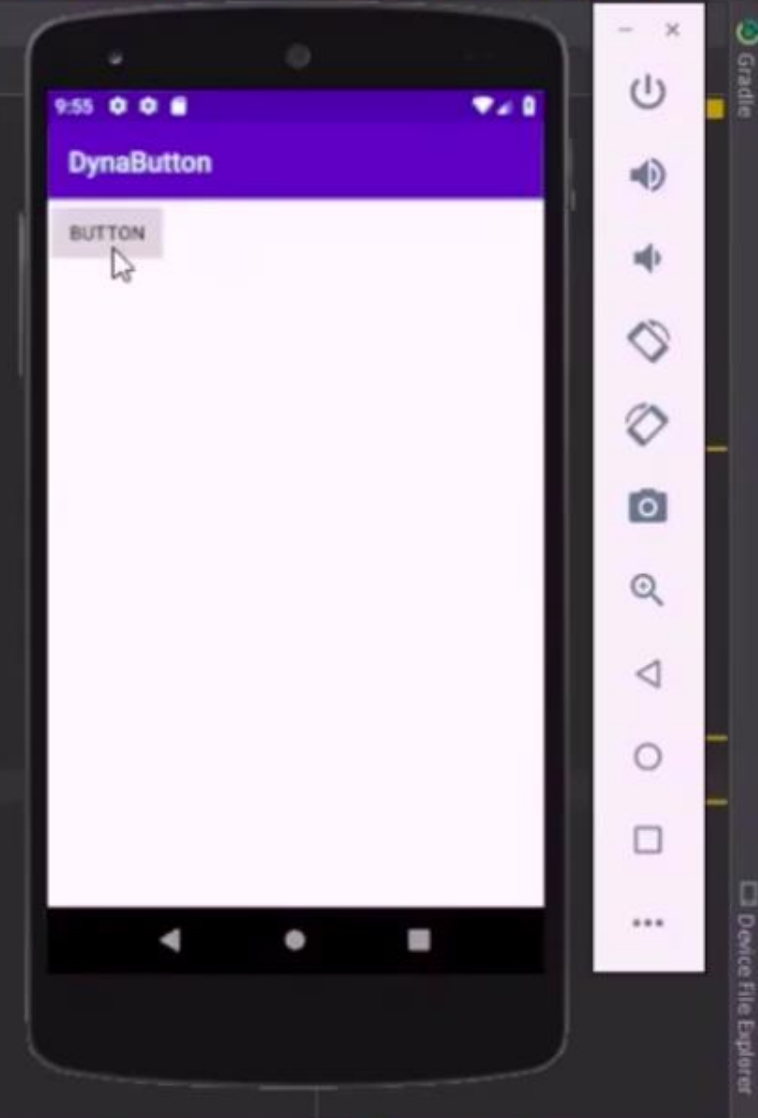


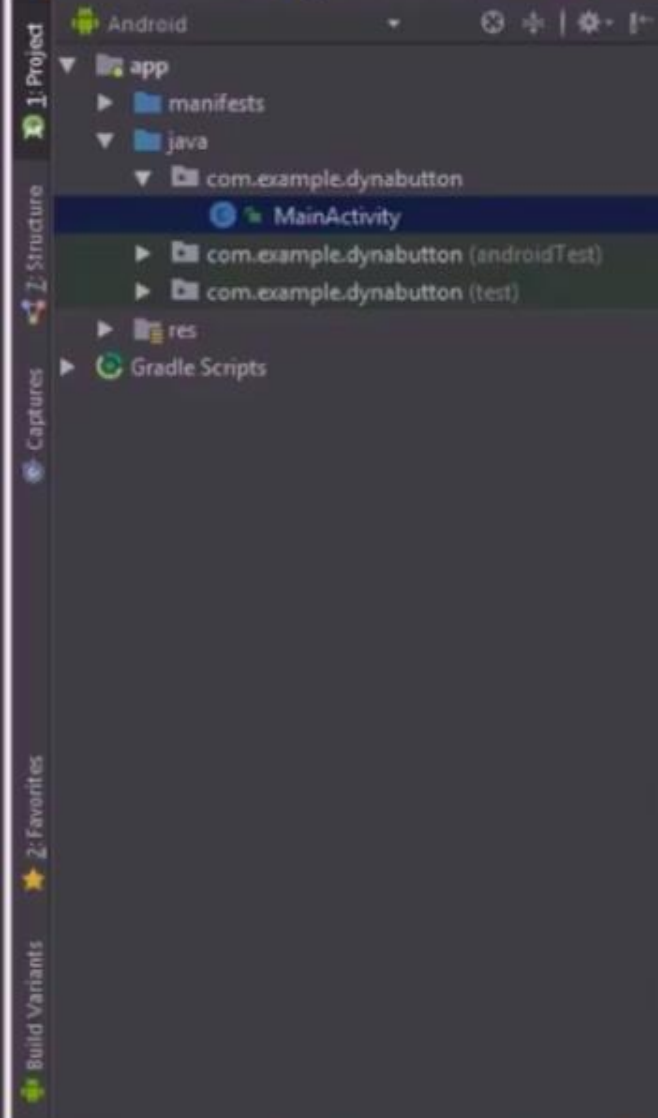


```
MainActivity addButton()
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     Button newbtn;
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addButton();
16            }
17        });
18    }
19    public void addButton(){
20        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);
21        newbtn = new Button(context.this);
22        newbtn.setText("New Button");
23        layout.addView(newbtn);
24    }
25 }
26
27
28
29
30
```

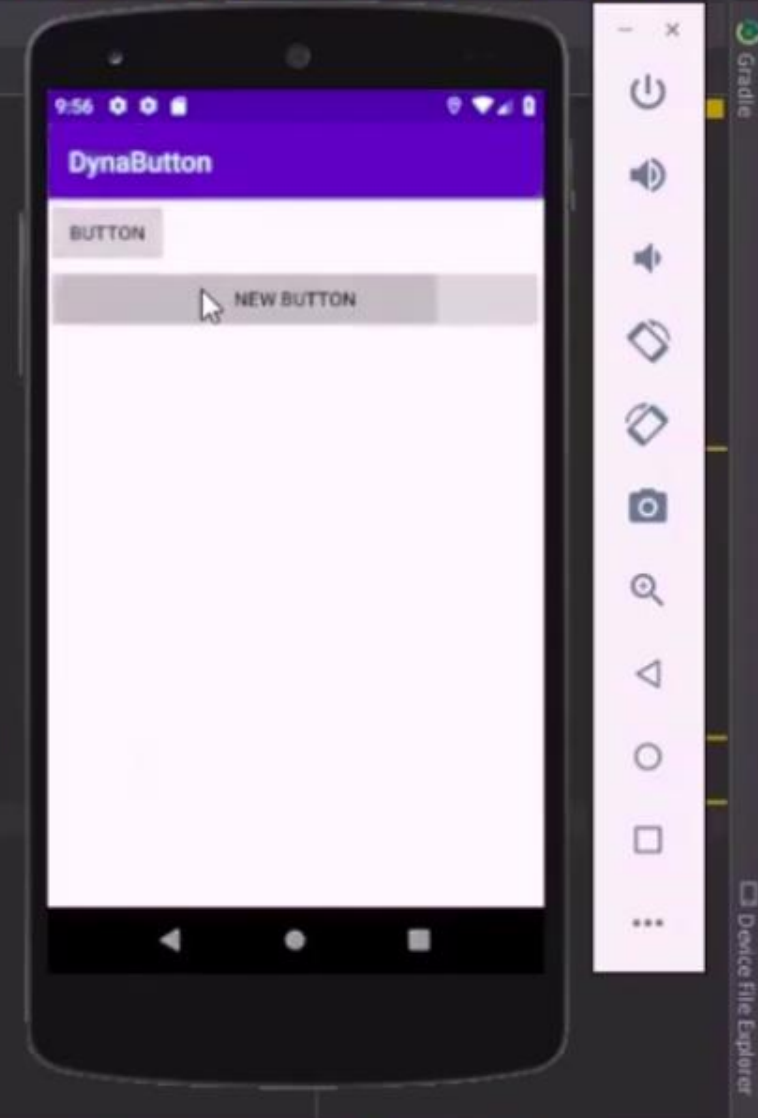



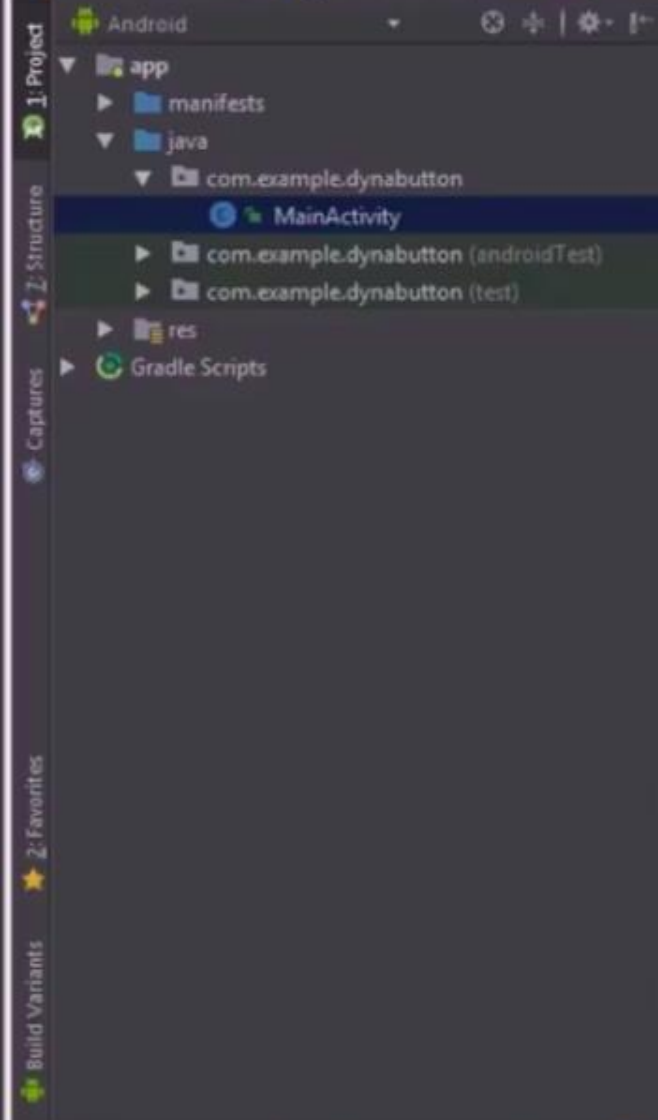
```
1 package com.example.dynabutton;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     Button newbtn;
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addButton();
16            }
17        });
18    }
19    public void addButton(){
20        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);
21        newbtn = new Button(context.this);
22        newbtn.setText("new Button");
23    }
24 }
```





```
MainActivity addButton()
1 package com.example.dynabutton;
2
3 import ...
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5 public class MainActivity extends AppCompatActivity {
6     Button newbtn;
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        Button btn = (Button) findViewById(R.id.btn1);
12        btn.setOnClickListener(new View.OnClickListener() {
13            @Override
14            public void onClick(View v) {
15                addButton();
16            }
17        });
18    }
19    public void addButton(){
20        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);
21        newbtn = new Button( context this);
22        newbtn.setText("New Button");
23        layout.addView(newbtn);
24    }
25 }
26
27
28
29
30
```





```
MainActivity addButton()  
1 package com.example.dynabutton;  
2  
3 import ...  
4  
5 public class MainActivity extends AppCompatActivity {  
6     Button newbtn;  
7     @Override  
8     protected void onCreate(Bundle savedInstanceState) {  
9         super.onCreate(savedInstanceState);  
10        setContentView(R.layout.activity_main);  
11        Button btn = (Button) findViewById(R.id.btn1);  
12        btn.setOnClickListener(new View.OnClickListener() {  
13            @Override  
14            public void onClick(View v) {  
15                addButton();  
16            }  
17        });  
18    }  
19  
20    public void addButton(){  
21        LinearLayout layout = (LinearLayout) findViewById(R.id.rootlayout);  
22        newbtn = new Button(context.this);  
23        newbtn.setText("New Button");  
24        layout.addView(newbtn);  
25    }  
26 }  
27  
28  
29  
30
```

