

TASK GUIDE (B1.07)

A. Objectives.

Students create a method to do conversion

B. Requirements.

Hardware:

- 2 GB RAM minimum, 8 GB RAM recommended
- 2 GB of available disk space minimum, 4 GB Recommended (500 MB for IDE + 1.5 GB for Android SDK and emulator system image)
- 1280 x 800 minimum screen resolution
- Intel processor with support for Intel VT-x, Intel EM64T (Intel 64), and Execute Disable (XD) Bit functionality

Software:

- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- JDK 8
- Android Studio IDE 3.5

C. Resources.

Documents:

- Guide

Supplement files:

- ViewTest.java

Test code:

- TestB1BasicActivityKT071.java

D. Task Description.

Student start to write a method to do conversion in layout.

Reference to learn Kotlin:

<https://kotlinlang.org/docs/reference/android-overview.html>

E. Guidance.

1. Open BasicApp project that already test passed.
2. Open MainActivity.kt and create a new void method with name “doConvert”.
3. Make an algorithm to convert value from inputTxt and put the result to outputTxt depend on unit that selected on oriList and convList.

- Use this code to get selected RadioButton of RadioGroup

```
val selected =  
findViewById<View>(unitType!!.checkedRadioButtonId) as  
RadioButton
```

- Use to convert from string to double.

```
val `val` = inputTxt!!.text.toString().toDouble()
```

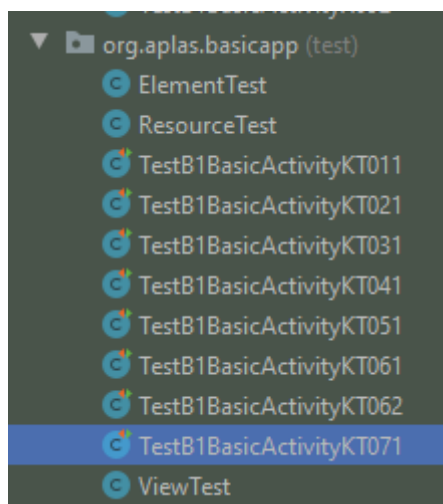
- Use this code to get Boolean checked value of checkbox.

```
val res = convertUnit(  
    selected.text.toString(),  
    unitOri!!.selectedItem.toString(),  
    unitConv!!.selectedItem.toString(),  
    `val`  
)
```

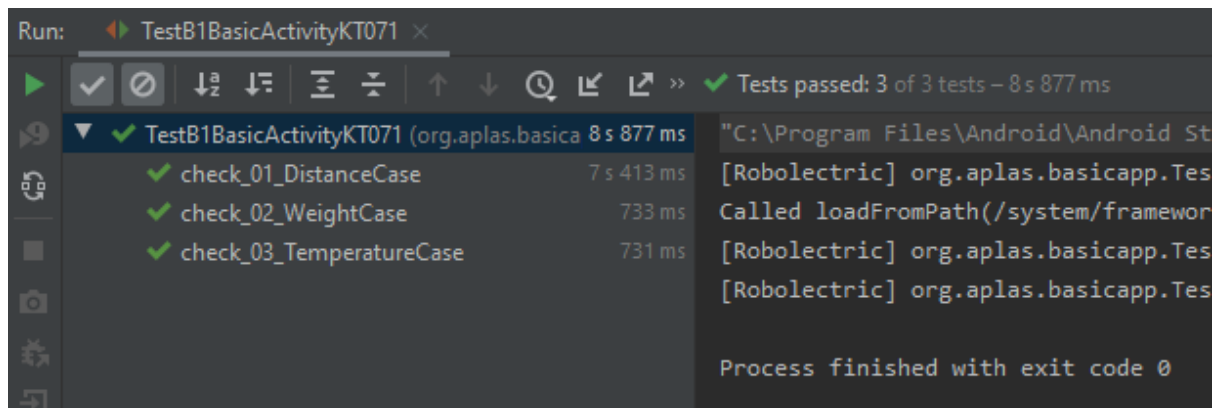
- Set the outputTxt text with the string result.

```
outputTxt!!.setText(strResult(res, roundBox!!.isChecked))
```

4. Copy “TestB1BasicActivityKT071.java” file to “org.aplas.basicapp (test)” folder.
Replace if possible.



5. Right click on the “TestB1BasicActivityKT071.java” file then choose Run ‘TestB1BasicActivityKT071’ and click it. It may take long time to execute.
6. Get the result of your task. If passed you will get green check. If the test failed, you will get orange check get the messages and you must start your project again.



F. Testing.

You have to try until get all green checks and continue to the next task.