Android - Handler

- Long running operations may not be performed on the UI thread, otherwise a ANR (Application Not Responding) Error will be issued.
- Standard Java class java.lang.Thread can be used under Android to perform long running operations.
- To simplify synchronization, class android.os.Handler can be used.
- Class Handler is used to deliver queued message one after another via the callback handleMessage().
- A Handler is associated with a thread. If created in the context of the UI thread, the Handler can be used to safely update the UI.
- The actual dispatching happens by an instance of class Looper. Android will create a Looper instance for the UI thread automatically.
- A different thread can also have its own Looper instance. Class android.os. HandlerThread is a helper class that automatically creates a Looper for a new thread.

Entering "12" and then pushing the button "Compute" will show the result (144) after a 5 second delay.

References

- [java.lang.Thread](#)
- [android.os.Handler](#)
- [android.os.Looper](#)
- [android.os.HandlerThread](#)

Exercise

Class android.view.View has a method post() that can also be used to post messages to the UI thread. Rewrite the application such that View.post() is used instead of class UIHandler.