

# Multithreaded Programming: Basics

1. Make a coin-flipping class that implements `Runnable`. The `run` method should flip 1000 coins and print out whenever they get 3 or more consecutive heads. Start 5 instances of the coin-flipping task. In the printouts, you can use the `Thread.currentThread().getName()` to identify the thread. Remember to look in the DDMS window to see the print results.

You are following variation 1 of the basic threading approach, so your code will look something like this:

```
public class Flipper implements Runnable {
    public void run() { loop and do coin flipping }
}
```

```
-----
public class MainClass extends Activity {
    public void buttonHandler(View clickedButton) {
        ExecutorService taskList = ...;
        for(int i=0; i<5; i++) {
            taskList.execute(new Flipper());
        }
    }
}
```

2. Do a similar task, but this time have your Activity implement `Runnable`. Now your code will look roughly like this:

```
public class MainClass extends Activity implements Runnable {
    public void buttonHandler(View clickedButton) {
        ExecutorService taskList = ...;
        for(int i=0; i<5; i++) {
            taskList.execute(this);
        }
    }
    public void run() { loop and do coin flipping }
}
```

3. Do a similar task again, but this time use an inner class for the Flipper (the class that implements `Runnable`).