Learning Objectives in this Part of the Lesson

• Understand the purpose of the Java executor framework
• Recognize the features & benefits of thread pools
• Note a human known use of thread pools
• Know the Java Executor framework thread pools
• Learn the key interfaces the framework provides
• Appreciate the factory methods provided by the Java Executors class
The Java Executors Class
The Java Executors Class

- Executors is a utility class that creates executor implementations.

See [docs.oracle.com/javase/8/docs/api/java/util/concurrent/Executors.html](docs.oracle.com/javase/8/docs/api/java/util/concurrent/Executors.html)
Executors is a utility class that creates executor implementations.

A utility class is a final class having only static methods, no (non-static) state, & a private constructor.

The Executors utility class has factory methods that create desired executors.

See en.wikipedia.org/wiki/Factory_method_pattern
The Executors utility class has factory methods that create desired executors. For example, cached, fixed, work-stealing thread pools, etc.
The Executors utility class also has a factory method that can be used to create new threads.

There’s a default thread factory.

See [docs.oracle.com/javase/8/docs/api/java/util/concurrent/Executors.html#defaultThreadFactory](docs.oracle.com/javase/8/docs/api/java/util/concurrent/Executors.html#defaultThreadFactory)
The Executors utility class also has a factory method that can be used to create new threads.

- The DefaultThreadFactory implements the Thread Factory interface.

See [docs.oracle.com/javase/8/docs/api/java/util/concurrent/ThreadFactory.html](docs.oracle.com/javase/8/docs/api/java/util/concurrent/ThreadFactory.html)
The Executors utility class also has a factory method that can be used to create new threads.

- The DefaultThreadFactory implements the ThreadFactory interface.
- Many Executors factory methods use the default thread factory.

See docs.oracle.com/javase/8/docs/api/java/util/concurrent/Executors.html#defaultThreadFactory
The Executors utility class also has a factory method that can be used to create new threads.

- The DefaultThreadFactory implements the Thread Factory interface.
- You can also define custom thread factories & pass them to factory methods.

End of the Java Executors Framework: The Java Executors Interface