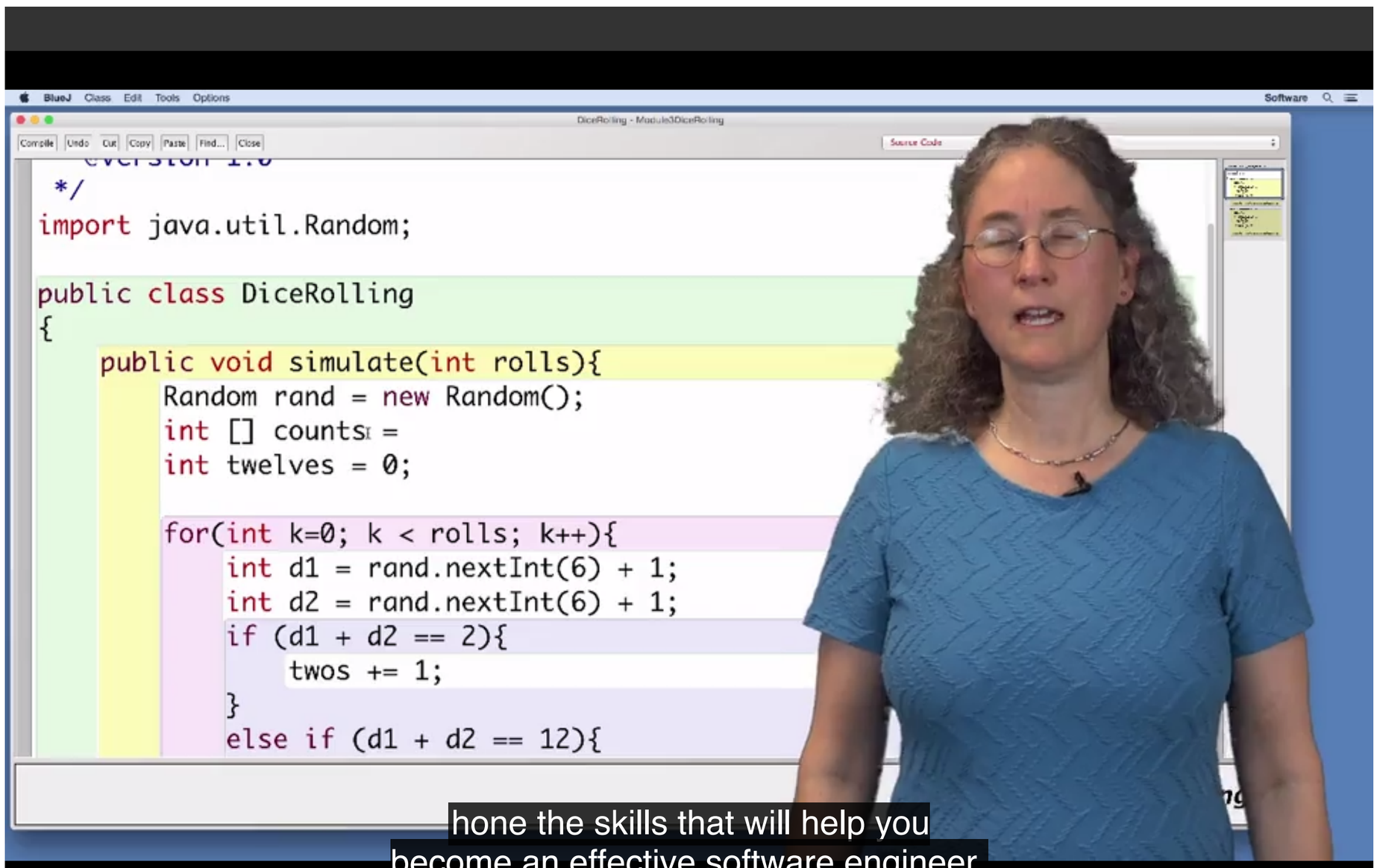


Welcome

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**Lecture Video** mp4

**Subtitles (English)** WebVTT

**Transcript (English)** txt

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## Interactive Transcript

Search Transcript

English

0:00
[SOUND] This is Duke University. >> Hi, I'm Susan and I'm really excited to be working with our team at Duke to introduce this course. Java Programming, Arrays, Lists, and Structured Data. We've designed a great set of problems and programs that combine real world data analytics with lessons that introduce security and cryptography. Whether this is your first course with our great team, or you're coming from our previous courses as part of Java programming and introduction to software specialization. You'll use a seven-step process to help you design and implement Java programs to solve problems and hone the skills that will help you become an effective software engineer. In working on the problems we've designed, you'll learn about arrays and maps, two standard data structures that are used to create efficient and robust programs to solve problems. As part of our cryptography lesson, you'll learn how the words melon and cubed are related by the number 16. >> Hello, I'm Drew. In this course, you'll be using the edu.duke library of classes we've designed to write programs that solve interesting problems, like analyzing web logs, and generating random stories from templates. But you'll also use the standard java.util library of classes that will help you grow your knowledge and skill in using java to create solutions to these problems. Understanding APIs so you can use code from libraries is an important part of this course, as is beginning to develop an understanding of object-oriented program. In this course, you'll learn how classes are structured and how programs are created by strategically combining classes together. You'll also learn about how the words fusion and layout are related by the number 20.

1:49
>> Hi, I'm Robert. For this course, we've designed an exciting mini-project as part of this course to help you learn more about classes, object-orientation, and data structures. You will use standard techniques and libraries that are part of nearly all java programs designed to solve problems at scale. We've structured the module in this course to introduce topics, and then explore them in more detail, and with more robust, scalable solutions that improve upon that initial program. This allows you to learn the new techniques while solving a familiar problem. We hope that this learning approach will facilitate success for all learners.

2:27
Also in this course, you'll learn how the number 19 connects to words, jolly and cheer. >> Hi, I'm Owen. I'm excited about the approach we've taken in this course to introduce two important programming structures, arrays and maps. These are not simply Java structures. They are used in every programming language to create efficient solutions to programming problems. By exploring how these structures are related and encountering them in familiar contexts, you'll be able to practice using them as you develop mastery with both concepts and the Java libraries that anchor these concepts in code. You'll also learn why having 14 fake toys would be an enormous cryptographic coincidence. Welcome to arrays, lists and structured data.