CSE 3
Fluency in Technology

Adventures in Computational Thinking
By Holly Tan

Computational thinking
Computational thinking is the process of thinking at multiple levels of abstraction. Through computational thinking, one can:
• Problem Solve
• Gain greater understanding of the powers of technology and people
• Design systems for understanding these concepts

Data Analysis and Visualization in Microsoft Excel
Microsoft Excel allows the user to organize and analyze data. This data can be organized into visual charts and graphs. Various functions within Excel allows the user to carry out mathematical functions and group data.

IDLE (Integrated Development and Learning Environment) Programming with Python
Python is an integrated development and learning environment. It allows the user to create input that influenced what the output would become. This language included ‘if statements’ and ‘loop’ which created an interactive environment for the user.

Dynamic Webpage Programming with JavaScript
JavaScript allows a webpage to become more dynamic by including user input. This input is reminiscent to a “build your own adventure,” in that the user’s statements propagate what will happen next. This makes the webpage more interactive.

Desktop Publishing with Microsoft Word
Microsoft Word’s advanced features allow users to customize a document and create organized, specific products that convey the message they wish to present.

Presentation of Information with Microsoft PowerPoint
PowerPoint allows users to organize their information and customize how they wish to present it. Examples of customizable features include animations, transitions, and preset styles for the presentation.

Making Information Available to the World with HTML and Web Pages
Hypertext Markup Language (HTML) allows an individual to create something that is original and can be customizes to the user’s preference. The product can then be saved and available on the world wide web for everyone to see.

Course Overview
CSE 3 is an introduction course that allows students to become more knowledgeable about the interworking and advancement of technology. This course provides skills in programming, allowing for students to better integrate into a world that is greatly shaped by technology.

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JavaStreem

Convert a value between 0-255 to binary

Decimal

Binary

Convert

Share

Let’s Play blackjack

Decadic

Binary

Now your turn!