
Name:
Robert Lefrandt

Grading Quarter:
2

Week Beginning: 05
11/13/2023

School Year: 2023-24

Subject: Software & App Design

Monday	Notes: 11/13/2023	<p>***Discuss purchases/CTE Assessment/tests:</p> <ul style="list-style-type: none"> Unit2 Practice Test Unit2 Test Certifications- Web, Python, Arduino- C/C++ DEC(Eastern Az)/FBLA Skills Competitions Physical computing-programming VCode/Python IDE Cloud/online Thonny IDE _Check BRHS Helpdesk about install/Image SunFounder Raspberry Pi Pico W Ultimate Starter Kit with Online Tutorials, 450+ Items, 117 Projects, MicroPython, Piper Make and C/C++ (Compatible with Arduino IDE) 	<p>Academic Standards: AZ_CTE SoftwareAppDesign TechStandards</p>
	<u>Operators and Expressions in Python - Real Python</u>		
	A sequence of operands and operators, like a + b - 5, is called an expression . Python supports many operators for combining data objects into expressions .		<p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND STRINGS IN WRITING PROGRAMS</p>
	Compare other LMS's	<p>Objective: students learn how to program</p> <ul style="list-style-type: none"> Identify if statements in code Identify the condition within an if statement Describe how an if statement makes a decision Identify which comparison operator is most appropriate in a given context Describe where comparison operators fall in the order of operations for Python Differentiate between the = and == operators and describe the function of each Explain how white space is used to delineate the beginning and end of if statement sections 	<p>STANDARD 5.0 PERFORM BASIC COMPUTER MATHEMATICS IN INFORMATION TECHNOLOGY</p>
	Harvard CS50x		<p>STANDARD 6.0 UTILIZE CONDITIONAL STRUCTURES IN WRITING PROGRAMS 6.1</p>
	MS Visual Code Studio AI assistants		
	Prompt Engineering	<p>Lesson Overview: Students will login to their Smart Tech Coders CS 201 Python accounts. Students will work though the Learning Management System (LMS) curriculum to learn Python.</p>	<p>Use the correct syntax for decision statements (e.g., if/else, if, and switch case) 6.2</p>
	APE CS AP Principles	<p>Unit 2: Decisions Lesson 2.1: Conditionals (if) Lesson 2.2 - Conditionals (elif and else)</p> <ul style="list-style-type: none"> write a conditional that considers multiple cases. 	<p>Compare values using relational operators (e.g., =, >, <, >=, <=, and not equal) 6.3</p>
	Python Programmer Certification (PCEP)	<p>Lesson 2.3 Built in Libraries (Rev. Oct. 9) Lesson 2.3 Advanced Math Operations (Rev. Oct 10) Lesson 2.4 Boolean 2.4 (Rev. Compound Expressions Oct. 18) Flexible Input (Rev. Oct. 20)</p>	<p>Evaluate Boolean expressions (e.g., AND, OR, NOT, NOR, and XOR) 6.4</p>
		<p>Assessment: Unit 2 Practice Test, Test (Oct. 26) Scoping & Presenting Work (Rev. Oct. 27)</p>	<p>Use the correct nesting for decision structures</p>
		<p><u>*Goal* Cover before end of Semester 1</u> Unit 3: Loops, 3.1 While Loops, 3.2 Controlling Loops, 3.3 Classes, 3.4 Graphics, 3.5 Animation</p>	<p>STANDARD 12.0 DEVELOP A PROGRAM</p>
		<p>Activity Library</p> <p>***If finish TechSmartCoders – Python Daily Lessons and Activity library, then go to: FreeCodeCamp and work on Front/Back End Web Stack and Certifications***</p>	<p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAM OPERATION</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNITY RESOURCES 14.1 Use standard library functions</p>

Tuesday	Notes: 11/14/2023	<p>***Discuss purchases/CTE Assessment/tests:</p> <ul style="list-style-type: none"> Unit2 Practice Test Unit2 Test Certifications- Web, Python, Arduino- C/C++ DEC(Eastern Az)/FBLA Skills Competitions Physical computing-programming VCode/Python IDE Cloud/online Thonny IDE _Check BRHS Helpdesk about install/Image SunFounder Raspberry Pi Pico W Ultimate Starter Kit with Online Tutorials, 450+ Items, 117 Projects, MicroPython, Piper Make and C/C++ (Compatible with Arduino IDE) 	<p>Academic Standards: AZ_CTE SoftwareAppDesign TechStandards</p>
	<u>Operators and Expressions in Python - Real Python</u>		
	A sequence of operands and operators, like a + b - 5, is called an expression . Python supports many operators for combining data objects into expressions .	<p>Objective: students learn how to program</p> <ul style="list-style-type: none"> Identify if statements in code Identify the condition within an if statement Describe how an if statement makes a decision Identify which comparison operator is most appropriate in a given context Describe where comparison operators fall in the order of operations for Python Differentiate between the = and == operators and describe the function of each Explain how white space is used to delineate the beginning and end of if statement sections 	<p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND STRINGS IN WRITING PROGRAMS</p>
	Compare other LMS's		<p>STANDARD 5.0 PERFORM BASIC COMPUTER MATHEMATICS IN INFORMATION TECHNOLOGY</p>
	Harvard CS50x		<p>STANDARD 6.0 UTILIZE CONDITIONAL STRUCTURES IN WRITING PROGRAMS 6.1</p>
	MS Visual Code Studio		
	AI assistants	<p>Lesson Overview: Students will login to their Smart Tech Coders CS 201 Python accounts. Students will work though the Learning Management System (LMS) curriculum to learn Python.</p>	<p>Use the correct syntax for decision statements (e.g., if/else, if, and switch case)</p>
	Prompt Engineering		6.2
	APE CS AP Principles	<p>Unit 2: Decisions Lesson 2.1: Conditionals (if) Lesson 2.2 - Conditionals (elif and else)</p> <ul style="list-style-type: none"> write a conditional that considers multiple cases. 	<p>Compare values using relational operators (e.g., =, >, <, >=, <=, and not equal)</p>
	Python Programmer Certification (PCEP)	<p>Lesson 2.3 Built in Libraries (Rev. Oct. 9) Lesson 2.3 Advanced Math Operations (Rev. Oct 10) Lesson 2.4 Boolean 2.4 (Rev. Compound Expressions Oct. 18) Flexible Input (Rev. Oct. 20)</p> <p>Assessment: Unit 2 Practice Test, Test (Oct. 26) Scoping & Presenting Work (Rev. Oct. 27)</p> <p><u>*Goal* Cover before end of Semester 1</u> Unit 3: Loops, 3.1 While Loops, 3.2 Controlling Loops, 3.3 Classes, 3.4 Graphics, 3.5 Animation</p> <p>Activity Library</p> <p>***If finish TechSmartCoders – Python Daily Lessons and Activity library, then go to: FreeCodeCamp and work on Front/Back End Web Stack and Certifications***</p>	<p>6.3 Evaluate Boolean expressions (e.g., AND, OR, NOT, NOR, and XOR)</p> <p>6.4 Use the correct nesting for decision structures</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAM OPERATION</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNITY RESOURCES 14.1 Use standard library functions</p>

Wednesday	Notes: 11/15/2023	<ul style="list-style-type: none"> • ***Discuss purchases/CTE Assessment/tests: • Unit2 Practice Test • Unit2 Test • Certifications- Web, Python, Arduino- C/C++ • DEC(Eastern Az)/FBLA Skills Competitions • Physical computing-programming • VCode/Python IDE Cloud/online • Thonny IDE _Check BRHS Helpdesk about install/Image • <u>SunFounder Raspberry Pi Pico W Ultimate Starter Kit with Online Tutorials, 450+ Items, 117 Projects, MicroPython, Piper Make and C/C++ (Compatible with Arduino IDE)</u> • 	Academic Standards: AZ_CTE SoftwareAppDesign TechStandards
	<u>Operators and Expressions in Python - Real Python</u>		
	A sequence of operands and operators, like a + b - 5, is called an expression . Python supports many operators for combining data objects into expressions .		STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND STRINGS IN WRITING PROGRAMS STANDARD 5.0 PERFORM BASIC COMPUTER MATHEMATICS IN INFORMATION TECHNOLOGY STANDARD 6.0 UTILIZE CONDITIONAL STRUCTURES IN WRITING PROGRAMS 6.1
	Compare other LMS's		
	Harvard CS50x	<ul style="list-style-type: none"> • Objective: • students learn how to program • Identify if statements in code • Identify the condition within an if statement • Describe how an if statement makes a decision • Identify which comparison operator is most appropriate in a given context • Describe where comparison operators fall in the order of operations for Python • Differentiate between the = and == operators and describe the function of each • Explain how white space is used to delineate the beginning and end of if statement sections • 	Use the correct syntax for decision statements (e.g., if/else, if, and switch case) 6.2
	MS Visual Code Studio AI assistants	<ul style="list-style-type: none"> • Lesson Overview: • Students will login to their Smart Tech Coders CS 201 Python accounts. Students will work though the Learning Management System (LMS) curriculum to learn Python. • 	
	Prompt Engineering	<ul style="list-style-type: none"> • Unit 2: Decisions • Lesson 2.1: Conditionals (if) • Lesson 2.2 - Conditionals (elif and else) • write a conditional that considers multiple cases. • Lesson 2.3 Built in Libraries (Rev. Oct. 9) • Lesson 2.3 Advanced Math Operations (Rev. Oct 10) • Lesson 2.4 Boolean 2.4 (Rev. Compound Expressions Oct. 18) • Flexible Input (Rev. Oct. 20) • Assessment: Unit 2 Practice Test, Test (Oct. 26) • Scoping & Presenting Work (Rev. Oct. 27) • <i>*Goal* Cover before end of Semester 1</i> • Unit 3: Loops, 3.1 While Loops, 3.2 Controlling Loops, 3.3 Classes, 3.4 Graphics, 3.5 Animation • 	Compare values using relational operators (e.g., =, >, <, >=, <=, and not equal) 6.3
	APE CS AP Principles		Evaluate Boolean expressions (e.g., AND, OR, NOT, NOR, and XOR) 6.4
	Python Programmer Certification (PCEP)	<ul style="list-style-type: none"> • Activity Library • ***If finish TechSmartCoders – Python Daily Lessons and Activity library, then go to: FreeCodeCamp and work on Front/Back End Web Stack and Certifications*** • 	Use the correct nesting for decision structures STANDARD 12.0 DEVELOP A PROGRAM STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAM OPERATION STANDARD 14.0 UTILIZE AND CREATE COMMUNITY RESOURCES 14.1 Use standard library functions

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