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| Name:<br>Robert Lefrandt | Grading Quarter:<br>1          | Week Beginning:<br>08/28/2023 |
| School Year: 2023-24     | Subject: Software & App Design |                               |

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| <div>Monday</div> | <p>Notes:</p> <p>Unit 1:<br/>Linear Programs</p> <p>Lesson:<br/>1.2 Libraries</p> <p>Yellow Done</p> <p>Green Do/new Try to Complete</p> <p>And move on to 1.3 Values On Monday or Tuesday</p> | <p>08/28/2023 - Monday - 5th Week</p> <p><b><u>Objective:</u></b><br/> <b>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</b><br/> 1.1 Establish objectives and outcomes for a task<br/> 1.2 Explain the process of decomposing a large programming problem into smaller, more manageable procedures<br/> 1.3 Explain “visualizing” as a problem-solving technique prior to writing code<br/> 1.4 Describe problem-solving and troubleshooting strategies applicable to software development</p> <p>12.1 Use a program editor to enter and modify code<br/> 12.2 Identify correct input/output statements<br/> 12.3 Choose the correct method of assigning input<br/> 13.1 Identify errors in program modules</p> <p>14.1 Use standard library functions<br/> 14.2 Find and use third party libraries (e.g., web-based and package managers)<br/> 14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p> <p>Lesson Overview:<br/> Students will login to their Smart Tech Coders CS 201 Python accounts. Students will work through the Learning Management System (LMS) curriculum to learn Python.</p> <p>Unit 1: Linear Programs<br/> Lesson: 1.2 Libraries<br/> Days: 4/4 (Finish Today – Green)</p> <p><u>Activities</u></p> <p>Warm-Up: Stick Figure Mod<br/> Libraries<br/> Roll the Dice<br/> Dinner Planner<br/> Warm-Up: Solve for Hypotenuse<br/> Documentation<br/> Build a Word<br/> Automated Trainer<br/> Warm-Up: Build a Creature<br/> Warm-Up: Is Palindrome</p> <p><u>Activity Library</u></p> <p>Marine Maze<br/> Song Sampler<br/> Decor Drawer</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>Academic Standards:</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PR</p> |
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| Tuesday | <p>Notes:</p> <p>Unit 1:<br/>Linear<br/>Programs</p> <p>Lesson:<br/>1.3<br/>Values</p> <p>Days:<br/>1/4</p> | <p>08/29/2023 - Tuesday - 45h Week</p> <p><b><u>Objective:</u></b></p> <p><b>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</b></p> <p>1.1 Establish objectives and outcomes for a task</p> <p>1.2 Explain the process of decomposing a large programming problem into smaller, more manageable procedures</p> <p>1.3 Explain “visualizing” as a problem-solving technique prior to writing code</p> <p>1.4 Describe problem-solving and troubleshooting strategies applicable to software development</p><br><p>4.1 Declare numeric, Boolean, character, string variables, and float and double</p> <p>4.2 Choose the appropriate data type for a given situation</p> <p>4.3 Identify the correct syntax and usage for constants and variables in a program</p> <p>4.4 Identify the correct syntax and safe functions for operations on strings, including length, substring, and concatenation</p><br><p>12.1 Use a program editor to enter and modify code</p> <p>12.2 Identify correct input/output statements</p> <p>12.3 Choose the correct method of assigning input</p> <p>12.10 Demonstrate the use of parameters to pass data into program modules</p><br><p>13.1 Identify errors in program modules</p><br><p>14.1 Use standard library functions</p> <p>14.2 Find and use third party libraries (e.g., web-based and package managers)</p> <p>14.3 Explain and interact with an Application Program Interface (API)</p><br><p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p><br><p>Lesson Overview:</p> <p>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><br><p>Unit 1: Linear Programs</p> <p>Lesson: 1.3 Values</p> <p>Days: 1/4</p><br><p><u>Activities</u></p><br><p>Warm-Up: Turn Ball</p> <p>Integers and Floats</p> <p>Horseshoe Order</p> <p>Math Practice</p> <p>Warm-Up: Data Check</p> <p>Typecasting</p> <p>Fishtank Runner</p> <p>Reducing Waste</p> <p>Warm-Up: How Much Screentime</p> <p>Warm-Up: Tip Calculator</p><br><p><u>Activity Library</u></p> <p>Song Shifter</p> <p>Saving Goals</p> | <p>Academic Standards:</p><br><p><a href="https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf">https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf</a></p> <p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND OPERATORS</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAMS</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNICABLE PROGRAMS</p><br><p><a href="https://www.azed.gov/cte/profskills/">https://www.azed.gov/cte/profskills/</a></p> |
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| Wednesday | <p>Notes:</p> <p>Unit 1:<br/>Linear Programs</p> <p>Lesson:<br/>1.3 Values</p> <p>Days:<br/>2/4</p> | <p>08/30/2023 - Wednesday - 5th Week</p> <p><b>Objective:</b><br/> <b>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</b><br/> 1.1 Establish objectives and outcomes for a task<br/> 1.2 Explain the process of decomposing a large programming problem into smaller, more manageable procedures<br/> 1.3 Explain “visualizing” as a problem-solving technique prior to writing code<br/> 1.4 Describe problem-solving and troubleshooting strategies applicable to software development</p> <p>4.1 Declare numeric, Boolean, character, string variables, and float and double<br/> 4.2 Choose the appropriate data type for a given situation<br/> 4.3 Identify the correct syntax and usage for constants and variables in a program<br/> 4.4 Identify the correct syntax and safe functions for operations on strings, including length, substring, and concatenation</p> <p>12.1 Use a program editor to enter and modify code<br/> 12.2 Identify correct input/output statements<br/> 12.3 Choose the correct method of assigning input<br/> 12.10 Demonstrate the use of parameters to pass data into program modules</p> <p>13.1 Identify errors in program modules</p> <p>14.1 Use standard library functions<br/> 14.2 Find and use third party libraries (e.g., web-based and package managers)<br/> 14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p> <p>Lesson Overview:<br/> 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>Unit 1: Linear Programs<br/> Lesson: 1.3 Values<br/> Days: 2/4</p> <p><u>Activities</u></p> <p>Warm-Up: Turn Ball<br/> Integers and Floats<br/> Horseshoe Order<br/> Math Practice<br/> Warm-Up: Data Check<br/> Typecasting<br/> Fishtank Runner<br/> Reducing Waste<br/> Warm-Up: How Much Screentime<br/> Warm-Up: Tip Calculator</p> <p><u>Activity Library</u><br/> Song Shifter</p> | <p>Academic Standards:</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf">https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf</a></p> <p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND OPERATORS</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAMS</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNICABLE PROGRAMS</p> <p><a href="https://www.azed.gov/cte/profskills/">https://www.azed.gov/cte/profskills/</a></p> |
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| Thursday | <p>Notes:</p> <p>Unit 1:<br/>Linear Programs</p> <p>Lesson:<br/>1.3 Values</p> <p>Days:<br/>3/4</p> | <p>08/31/2023 - Thursday - 5th Week</p> <p><b>Objective:</b></p> <p><b>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</b></p> <p>1.1 Establish objectives and outcomes for a task</p> <p>1.2 Explain the process of decomposing a large programming problem into smaller, more manageable procedures</p> <p>1.3 Explain “visualizing” as a problem-solving technique prior to writing code</p> <p>1.4 Describe problem-solving and troubleshooting strategies applicable to software development</p> <p>4.1 Declare numeric, Boolean, character, string variables, and float and double</p> <p>4.2 Choose the appropriate data type for a given situation</p> <p>4.3 Identify the correct syntax and usage for constants and variables in a program</p> <p>4.4 Identify the correct syntax and safe functions for operations on strings, including length, substring, and concatenation</p> <p>12.1 Use a program editor to enter and modify code</p> <p>12.2 Identify correct input/output statements</p> <p>12.3 Choose the correct method of assigning input</p> <p>12.10 Demonstrate the use of parameters to pass data into program modules</p> <p>13.1 Identify errors in program modules</p> <p>14.1 Use standard library functions</p> <p>14.2 Find and use third party libraries (e.g., web-based and package managers)</p> <p>14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p> <p>Lesson Overview:<br/>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>Unit 1: Linear Programs<br/>Lesson: 1.3 Values<br/>Days: 3/4</p> <p><u>Activities</u></p> <p>Warm-Up: Turn Ball<br/>Integers and Floats<br/>Horseshoe Order<br/>Math Practice<br/>Warm-Up: Data Check<br/>Typecasting<br/>Fishtank Runner<br/>Reducing Waste<br/>Warm-Up: How Much Screentime<br/>Warm-Up: Tip Calculator</p> <p><u>Activity Library</u><br/>Song Shifter<br/>Saving Goals</p> | <p>Academic Standards:</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf">https://www.azed.gov/sites/default/files/2020/09/Standard1.0ApplyProblemSolvingAndCriticalThinkingSkills.pdf</a></p> <p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND OPERATORS</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAMS</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNICABLE PROGRAMS</p> <p>14.1 Use standard library functions</p> <p>14.2 Find and use third party libraries (e.g., web-based and package managers)</p> <p>14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/cte/profskills/">https://www.azed.gov/cte/profskills/</a></p> |
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| Friday | <p>Notes:</p> <p>Unit 1:<br/>Linear Programs</p> <p>Lesson:<br/>1.3 Values</p> <p>Days:<br/>4/4</p> | <p>09/01/2023 - Friday - 5th Week</p> <p><b>Objective:</b></p> <p><b>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</b></p> <p>1.1 Establish objectives and outcomes for a task</p> <p>1.2 Explain the process of decomposing a large programming problem into smaller, more manageable procedures</p> <p>1.3 Explain “visualizing” as a problem-solving technique prior to writing code</p> <p>1.4 Describe problem-solving and troubleshooting strategies applicable to software development</p> <p>4.1 Declare numeric, Boolean, character, string variables, and float and double</p> <p>4.2 Choose the appropriate data type for a given situation</p> <p>4.3 Identify the correct syntax and usage for constants and variables in a program</p> <p>4.4 Identify the correct syntax and safe functions for operations on strings, including length, substring, and concatenation</p> <p>12.1 Use a program editor to enter and modify code</p> <p>12.2 Identify correct input/output statements</p> <p>12.3 Choose the correct method of assigning input</p> <p>12.10 Demonstrate the use of parameters to pass data into program modules</p> <p>13.1 Identify errors in program modules</p> <p>14.1 Use standard library functions</p> <p>14.2 Find and use third party libraries (e.g., web-based and package managers)</p> <p>14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p> <p>Lesson Overview:<br/>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>Unit 1: Linear Programs<br/>Lesson: 1.3 Values<br/>Days: 4/4</p> <p><u>Activities</u></p> <p>Warm-Up: Turn Ball<br/>Integers and Floats<br/>Horseshoe Order<br/>Math Practice<br/>Warm-Up: Data Check<br/>Typecasting<br/>Fishtank Runner<br/>Reducing Waste<br/>Warm-Up: How Much Screentime<br/>Warm-Up: Tip Calculator</p> <p><u>Activity Library</u><br/>Song Shifter<br/>Saving Goals<br/>Decor Helper</p> | <p><a href="https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf">https://www.azed.gov/sites/default/files/2020/09/SoftwareandAppDesignTSs11020200.pdf</a></p> <p>STANDARD 1.0 APPLY PROBLEM-SOLVING AND CRITICAL THINKING SKILLS</p> <p>STANDARD 4.0 UTILIZE PRIMITIVE DATA TYPES AND OPERATORS</p> <p>STANDARD 12.0 DEVELOP A PROGRAM</p> <p>STANDARD 13.0 TEST AND DEBUG TO VERIFY PROGRAMS</p> <p>STANDARD 14.0 UTILIZE AND CREATE COMMUNICATIONS</p> <p>14.1 Use standard library functions</p> <p>14.2 Find and use third party libraries (e.g., web-based and package managers)</p> <p>14.3 Explain and interact with an Application Program Interface (API)</p> <p><a href="https://www.azed.gov/cte/profskills/">https://www.azed.gov/cte/profskills/</a></p> |
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