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| **Video** Submit one video in .mp4, .wmv, .avi, or .mov format that demonstrates the running of at least one significant feature of your program. Your video must not exceed 1 minute in length and must not exceed 30MB in size  **Prompt 2a.** Provide a written response or audio narration in your video that:  ● identifies the programming language;  ● identifies the purpose of your program; and  ● explains what the video illustrates.  *(Must not exceed 150 words)* |
| The programming language that I used to create my program was Python 3. The purpose of my program is to be an entertainment game and functions by requiring the user to collect as many dots as possible without touching the side or themselves. The video demonstrates the start of the game and the user moving around with the controls, W forward, A left, and D right. Each circle the snake “eats” it earns points, which are then stored. The game ends when the snake runs into either the wall or it self, then the game resets to the default state. |

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| **2b.** Describe the incremental and iterative development process of your program, focusing on two distinct points in that process. Describe the difficulties and / or opportunities you encountered and how they were resolved or incorporated. In your description clearly indicate whether the development described was collaborative or independent. At least one of these points must refer to independent program development. *(Must not exceed 200 words)* |
| The goal of my program was the recreate the game “snake”. First, I started experimenting with using print and the console to update the game board, but I quickly figured out that tkinter was much easier to implement. After I made the decision to use tkinter, I designed the core elements of the game such as the snake, boarder, and “apple” (the dot the “snake” is trying to eat). Once I managed to perfect those systems, I added on a scoreboard feature so that players could compare scores after I received feedback from play testers.  Additionally, I had feedback from play testers claiming that the game was too easy. To solve this, I made it so that the “snake” slightly increases its speed when it consumes an “apple” to make the game more challenging. This made the game harder, but not too hard to the point where it felt unfair. |

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| **2c.** Capture and paste a program code segment that implements an algorithm (marked with an **oval** in **section 3**) and that is fundamental for your program to achieve its intended purpose. This code segment must be an algorithm you developed individually on your own, must include two or more algorithms, and must integrate mathematical and/or logical concepts. Describe how each algorithm within your selected algorithm functions independently, as well as in combination with others, to form a new algorithm that helps to achieve the intended purpose of the program. *(Must not exceed 200 words)* |
| Code Segment |
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| Written Response |
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| **2d.** Capture and paste a program code segment that contains an abstraction you developed individually on your own (marked with a **rectangle** in **section 3**). This abstraction must integrate mathematical and logical concepts. Explain how your abstraction helped manage the complexity of your program.*(Must not exceed 200 words)*  *(Must not exceed 250 words)* |
| Code Segment |
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| Written Response |
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