

CS Assignment 0

- 1.) If I were explaining the concept of left and right to an alien, I would use the alphabet to address the meaning of left of right, since the alien speaks the same language. The capital letter 'E' would be a perfect way to explain the concept, because I would say that the three prongs sticking out are to the right, while highlighting that the opposite direction is left. To further explain the idea, I would ask the alien to write out a sentence: 'My dog walks.' I could tell the alien that the possessive pronoun is on the left side and that the verb and period are on the right side of the sentence. Thus, the alien would have a good understanding of left and right.
- 2.) I would find the number of gas stations in the US and the world by going through records of transactions at said stations. I would group transaction histories by codes based on the location, yielding unique codes for each station. Then, these codes are separated with a command on the terminal. Another solution to the number of gas stations is the utilization of GPS mapping. I would develop variable that searches up keywords associated with gas sales on the GPS. From here, I would develop a code to filter to verify the existence of these gas stations and form a variable to sum the total gas stations.
- 3.) Since all baskets are mislabelled, the basket labelled both would yield either apple or orange. If the fruit is apple, then I can deduct that there are oranges and both left. From there, I can take note that the basket labelled apples is the orange basket, because the oranges basket is mislabelled. The orange basket has both.
- 4.) The grandfather told Dylan to line the quarters along the border of the square table to get an accurate estimate of the number of quarters that can fit. Dylan would find the area of the table in quarters to find the amount of quarters. For example, if Dylan lines a total of 12 quarters along two sides of the table, then Dylan would know there are 36 quarters to be placed on the table, figuring out who would win.
- 5.) The answer is 341, because the number has remainder of 5 using a 12, a remainder of 3 using 13, and no remainder with 11. This is the smallest number possible for this situation.

- 6.) Computer science is useful for solving problems associated with math or organizational purposes. There are also scientific applications, including those of chemistry and biology. These applications are crucial for the understanding of the construction of graphs with certain programming applications.
- 7.) 'Good' code is considered that which is free of bugs or errors, meaning the program functions smoothly.
- 8.) I have zero prior experience in computer science.