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Web fundamentals

Problem solving

Problem 1:

Step 1: The problem

a. The problem is you have to get the cat, the parrot and the bag of seed across the river one at a time.

b. An insight to this problem is the ordering of how to get them across the river.

c. The overall goal is not leaving the parrot and the cat together at the same time on either sides of the river.

Step 2: Breaking down the problem

1. The constraints are that you cannot leave the parrot and the cat alone together and you cannot leave the parrot and the bag of seed alone either.
2. Sub –goals is to get them across individually without incident.

Step 3: Potential solutions

1. Maybe moving the cat over first, parrot over first.

Step 4: Evaluations

1. If you move the cat over first the parrot will eat the bag of seed. If you move the bag of seed over first the cat will eat the parrot, if you move the parrot over first the cat will not eat the food.
2. Only the last solution will work without any incident

Step 5: Solution

1. Solution is to take the Parrot over to the other side first, then go back and grab the cat bring the cat to the over side and then grab the parrot and bring him back to the original side and then grab the bag of seed, bring it to the other side with the cat and drop it off, then go back to the original side and grab the parrot and bring him over to the other side with the cat and the bag of seed.
2. Some of the case tests, I tried bringing the cat over but then the bird will eat the seed, I tried to bring the seed over but then the cat eats the bird, so then I tried to bring the bird over first and that passed the first trial which seemed to work.

Problem 2:

Step 1: The problem

a. The problem is getting the probability of getting a matching pair of socks and you also have to get a matching pair of socks of each color.

b. An insight to the problem is it is a math problem getting the probability of getting the pairs.

c. My overall goal is to get matching socks of each color and a matching color of one pair.

Step 2: Breaking down the problem

1. The constraints in the problem is that you’re picking from the pile without looking and with no knowledge of where the socks are.
2. Sub goal is to get each sock out while still getting matches.

Step 3: Potential solutions

a.