**1.2 #38 (The Zebra Puzzle)**

**The Process**

I solved the problem by creating a table for each individual Nationality and all possible options for that person to have.

Ex.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Norwegian |  |  |  |  |  |
| **Occupation** | *Diplomat* | *Physician* | *Photographer* | *Violinist* | *Painter* |
|  | ✓ | **X** | **X** | **X** | **X** |
| **House Color** | *Yellow* | *Blue* | *Red* | *White* | *Green* |
|  | ✓ | **X** | **X** | **X** | **X** |
| **Pet** | *Fox* | *Horse* | *Snail* | *Dog* | *Zebra* |
|  | ✓ | **X** | **X** | **X** | **X** |
| **Favorite Drink** | *Mineral Water* | *Tea* | *Milk* | *Orange Juice* | *Coffee* |
|  | ✓ | **X** | **X** | **X** | **X** |

For each nationality, I made a table similar to the one above. After reading each clue and learning about the facts of the other nationalities, I was able to place an X in options that I knew could not be true for each person. I created another table to display the position of each boss and upon discovering each position, I would substitute in the values for that position. This table would ultimately become the solution table. After this long process of deduction, I was able to come to the final conclusion.

The Norwegian drinks mineral water and the Japanese has a zebra.

**The Solution**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Position 0** | **Position 1** | **Position 2** | **Position 3** | **Position 4** |
| **Nationality** | *Norwegian* | *Italian* | *Englishman* | *Spaniard* | *Japanese* |
| **Occupation** | *Diplomat* | *Physician* | *Photographer* | *Violinist* | *Painter* |
| **Color House** | *Yellow* | *Blue* | *Red* | *White* | *Green* |
| **Pet** | *Fox* | *Horse* | *Snails* | *Dog* | *Zebra* |
| **Favorite Drink** | *Mineral Water* | *Tea* | *Milk* | *Orange Juice* | *Coffee* |