a.

I had some difficulties when trying to split up the taxable income from the individual. For some reason, I had the hardest time trying to take $55000 out of the taxable income, then trying to take out $70000, and examining if the total of the taxable income was greater than $125000.I was able to split it up into sections with if statements and this allowed for each individual section of the income to be evaluated that certain amount of tax. I would check if the taxable income was less than $55000 and if it was the taxable income would just be the taxable income\* 0.04 but if the taxable income was greater than $55000, I would set a different variable to $55000 \* .04, since I already knew that $55000 was included in the income, and subtract $55000 from the taxable income to prepare it to the next if statement. I continued this until the spec, if income is greater than $125000 then tax the amount over $125000 at 9.3%, was satisfied. Realizing that else if statements played a huge role in this assignment made splitting up the taxable income much more doable as I focused on 2 different ways that income could be split rather than trying to accomplish it in one interconnected if statement. Another obstacle that I overcame was the fact that when you have a low taxable income and have a lot of kids, the tax will be in the negatives. Taxes can’t be in the negatives and the outcome didn’t mention anything about government grants so I had to figure out how to print out that an individual would pay $0 in taxes when it goes into the negatives. I just made another if statement for when the taxes go into the negatives, cout << name << “ would pay $0” would execute.

b.

Income that is less than $55000 and is a nurse with 0 kids (John Doe, 25000, nurse, 0)

Income that is greater than $125000 (Sherry Wilf, 284735, software engineer, 4)

No income and is a teacher with 4 kids (Bob Build, 0, teacher, 4)

Income that’s greater than $55000 and less than $125000 with 2 kids (Melissa Cuevas, 75364, popstar, 2)

Income with a decimal (Gabe Pagudar, 98354.69, twitch steamer, 3)

No name ( , 30643, plumber, 3)

Negative Income (Jane Doe, -10.42, ghost, 0)

No occupation (MJ, 2842, , 2)

A negative amount of children (BJ Adams, 676000, track star, -1)

Income that is greater than $125000 and is a teacher (Jade West, 325000, teacher, 3)

Income that is less than $125000 and has 10 kids (Bugs Bunny, 35265, farmer, 10)

1000 kids (Karen Jones, 100000, babysitter, 1000)

Negative income and kids (JJ City, -46372, olympic swimmer, -13)