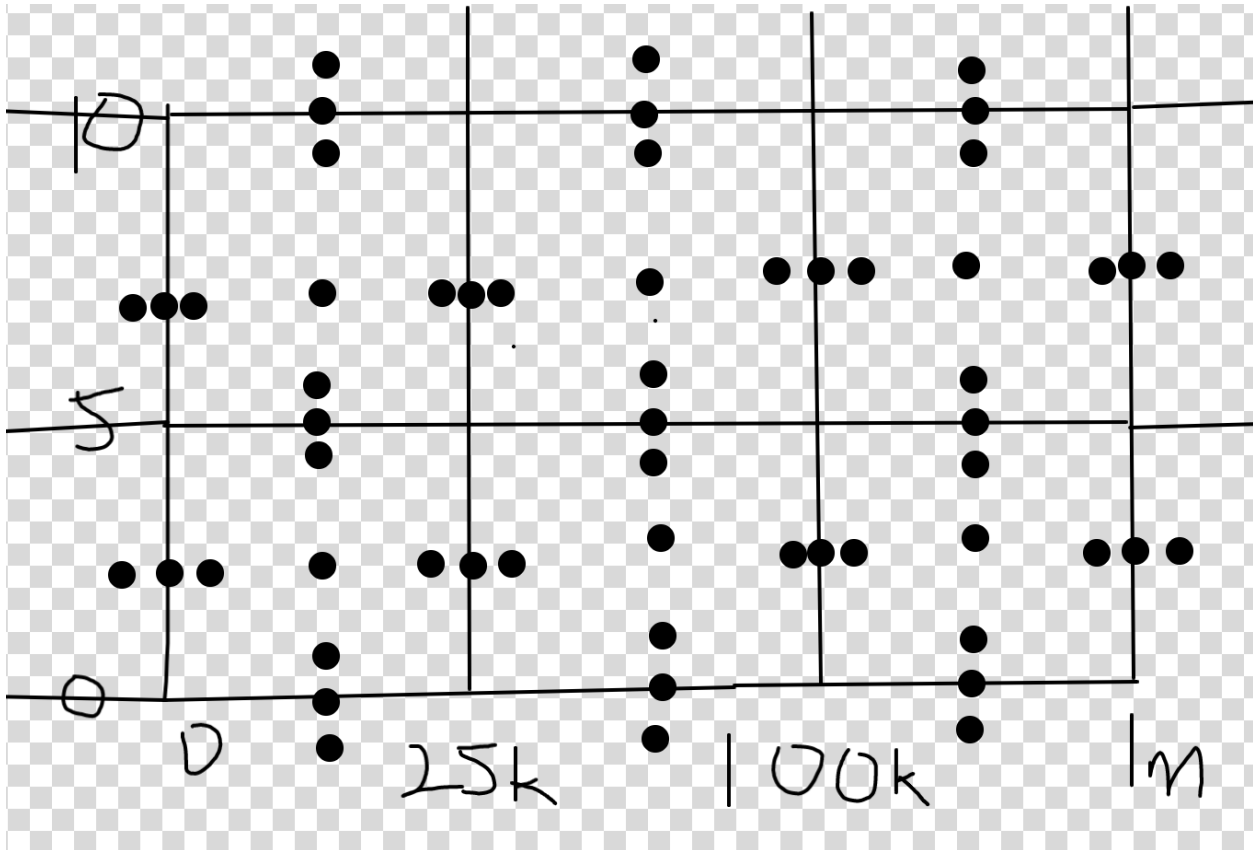


- Boundary values for AGI : {-1, 0, 1, 10000, 24999, 25000, 25001, 50000, 99999, 100000, 100001, 500000, 999999, 1000000, 1000001}  
Boundary values for dependency = {-1, 0, 1, 3, 4, 5, 6, 8, 9, 10, 11}



There are 57 cases

| AGI     | Dependencies | Tax          |
|---------|--------------|--------------|
| 10,000  | 3            | Not deducted |
| 24,999  | 1            | Not deducted |
| 50,000  | 9            | 20%          |
| -1      | 10           | Not Valid    |
| 25001   | 3            | 22%          |
| 100001  | 2            | 27%          |
| 500000  | 5            | 25%          |
| 1000001 | 2            | Not Valid    |

|       |    |           |
|-------|----|-----------|
| 25000 | -1 | Not Valid |
| 0     | 11 | Not Valid |

2.

EP1 = {numDigits > 9} Invalid

EP2 = {numDigits < 9} Invalid

EP3 = {numDigits = 9} valid

EP4 = {hyphens > 2} Invalid

EP5 = {hyphens < 2} Invalid

EP6 = {hyphens = 2} Valid

EP4 = {firstPartLength > 3} Invalid

EP5 = {firstPartLength < 3} Invalid

EP6 = {firstPartLength = 3} Valid

EP7 = {secondPartLength > 2} Invalid

EP8 = {secondPartLength < 2} Invalid

EP9 = {secondPartLength = 2} Valid

EP10 = {thirdPartLength > 4} Invalid

EP11 = {thirdPartLength < 4} Invalid

EP12 = {thirdPartLength = 4} Valid

EP13 = {firstPart = 000} invalid

EP14 = {firstPart = 666} invalid

EP15 = {001 <= firstPart <= 665} valid

EP16 = {667 <= firstPart <= 899} valid

EP17 = {900 <= firstPart <= 999} invalid

EP18 = {999 < firstPart} invalid

EP19 = {secondPart < 01} invalid

EP20 = {01 <= secondPart <= 99} valid

EP21 = {secondPart > 99} invalid

EP22 = {thirdPart < 0001} invalid

EP23 = {0001 <= thirdPart <= 9999} valid

EP24 = {thirdPart > 9999} invalid

| SSN           | Valid or Invalid or Format Issue |
|---------------|----------------------------------|
| 019-20-2022   | Valid                            |
| 01920-2022    | Format Issue                     |
| 000-20-2022   | Invalid                          |
| 666-23-4312   | Invalid                          |
| 01920-2022-1- | Format Issue                     |
| 934-23-4312   | Invalid                          |
| 839-23-4312   | Valid                            |
| 839-233-4312  | Invalid                          |
| 839-2-4312    | Invalid                          |
| 023-20-43132  | Invalid                          |
| 023-20-432    | Invalid                          |
| 99-20-4312    | Invalid                          |

3.

| Weight           | Distance              | Decision |
|------------------|-----------------------|----------|
| Weight <= 0      | Distance <10          | F        |
| Weight <= 0      | 10 <= Distance <= 800 | F        |
| Weight <= 0      | Distance > 800        | F        |
| 0 < Weight <= 5  | Distance < 10         | F        |
| 0 < Weight <= 5  | 10 <= Distance <= 800 | T        |
| 0 < Weight <= 5  | Distance > 800        | F        |
| 5 < Weight <= 10 | Distance < 10         | F        |
| 5 < Weight <= 10 | 10 <= Distance <= 800 | T        |
| 5 < Weight <= 10 | Distance > 800        | F        |
| Weight > 10      | Distance < 10         | F        |

|             |                       |   |
|-------------|-----------------------|---|
| Weight > 10 | 10 <= Distance <= 800 | F |
| Weight > 10 | Distance > 800        | F |

Test Cases:

|    |     |                                                                    |
|----|-----|--------------------------------------------------------------------|
| -3 | 9   | Weight must be greater than 0, Distance must be greater than 10    |
| -8 | 100 | Weight must be greater than 0                                      |
| -9 | 900 | Weight must be greater than 0, Distance cannot be greater than 800 |
| 2  | 8   | Distance must be greater than 10                                   |
| 3  | 500 | \$4.00 is the cost                                                 |
| 5  | 801 | Max distance is 800                                                |
| 7  | 7   | Distance must be greater than 10                                   |
| 8  | 700 | \$13.60 is the cost                                                |
| 9  | 900 | Max distance is 800                                                |
| 18 | 1   | Max weight is 10, Min distance is 10                               |
| 20 | 400 | Max Weight is 10                                                   |
| 30 | 870 | Max Weight is 10, Max Distance is 800                              |