Every tile has a different tile number (index). Assuming that you number the tiles in the natural way, the tiles in the first tiling will run from 0 to 120, and the tiles in the second tiling will run from 121 to 241 (why?).

Math. Each tiling contains 121 tiles, and we sequence the tilings continuously. So the next group of tiles (a tiling) starts where the previous one ends and continues for 121. Thus. 121->241

A given `input` point will be in exactly one tile in each tiling. For example, the point from the first example in the training set above, in1=0.1 and in2=0.1, or 0.1,0.1, will be in the first tile of the first seven tilings, that is, in tiles 0, 121, 242, 363, 484, 605, 726 (why?).

The point 0.1 is essentially 0.1/0.6 = 1/6th the length of a tile up and to the right of the tile origin. Each new tiling effectively shifts the point 1/8th a tile. So for the 7th tiling, it has been shifted (7-1)/ 8th = 0.75 of the way to the origin. 7-1 because no shifting takes place in the first tiling. So still has not shifted enough to consume the point 1/6th = 0.17 away from the origin.. Therefore it's in the first tile.

In the eighth tiling this point will be in the 13th tile (why?),

By the 8th tiling, the point has been shifted by 7X1/8th = 0.875 which means that the point at 0.17 would no longer fall in this first tile. It be shifted up and to the right tile which is tile 859 (why?) *The first tile of this tiling would be 847. But this point doesn't fall into that. It falls up a row and to the right a column. So 11+1 = 12 tiles beyond. So 847+12 = 859.*

`tilecode(0.1,0.1,tileIndices)`, then afterwards `tileIndices` will contain exactly these eight tile indices. The largest possible tile index is 967 (why?).

121 tiles / tiling X 8 tilings = 968 possible tiles. But 0 index based. So max index of 967.

Finally, the second and fourth examples should produce very similar sets of indices (they should have many tiles in common) (why?)

This is because the second and fourth examples are very similar in value, and thus should have several tiles in common. If they didn't this would mean our tile coder wasn't working properly.