

## **Cmput 366 p2 Why 1 Answers**

### **Answer 1:**

Because there are 121 tiles in the first tiling, so with each new tiling we increase by another 121 tiles therefore it will run from 121 to 241 in the 2<sup>nd</sup> tiling.

### **Answer 2:**

Because for the first 7 tiling's the coordinates are less than 0.6 so therefore they remain in the first tile of each tiling.

### **Answer 3:**

the offset continues to move up and right and since we started at the same magnitude for each coordinate we ended up moving 1 tile to the right and 1 tile up from the starting position of each tile, thus we end up at tile 13 which is the 2<sup>nd</sup> tile of the row and column.

### **Answer 4:**

Once we reach the 8<sup>th</sup> tiling the coordinates now lie in the 2<sup>nd</sup> row and 2<sup>nd</sup> column of the tiling (13<sup>th</sup> tile) therefore the indices of the 8<sup>th</sup> tiling will be 859 ( $7 \times 121 + 13$ ).

### **Answer 5:**

967 represents the last tile of the last tiling. This is the tile located at the furthest most column and highest row of the tiling. So if we started at the first tiling this would be tile 121. So for the 8<sup>th</sup> tiling this is  $121 \times 8 = 968$  and since indices in python start at 0 this is therefore 967.

### **Answer 6:**

The coordinates of the y column differ only by 0.1 which leads to a minimal change in tile indices because the offset will mostly lead to the same tile index for most tiling's.