

## Finding Common Elements in All Rows of a Matrix

```
let mat = [[1, 2, 1, 4, 8],[3, 7, 8, 5, 1],[8, 7, 7, 3, 1],[8, 1, 2, 7, 9]]
let mat2 = [[1, 2, 5, 4, 8],[3, 7, 8, 5, 1],[8, 7, 5, 3, 1],[8, 1, 2, 5, 9]]
function findCommonElement(matrix){
  let m = new Map()
  for(let i = 0; i < matrix.length; i++){
    for(let j = 0; j < matrix[0].length; j++){
      if(i===0){
        m.set(matrix[i][j], 1)
      }else if(m.get(matrix[i][j]) === i){
        m.set(matrix[i][j], i+1)
      }else{
        continue
      }
    }
  }
  let element = []
  for(const key of m.keys()){
    console.log("m key==>",key)
    if(m.get(key) === matrix.length){
      element.push(key)
    }
  }
  return element
}

console.log(findCommonElement(mat))
console.log(findCommonElement(mat2))
```