Question #1 (Hard)

Description:

Write a JavaScript function named mergeAndFormat that takes two parameters: an array of objects representing books, where each book has a title, author, and year properties, and a string representing a format type ("string" or "object"). The function should merge books with the same title and author but different years into a single entry. The way the books are merged should depend on the format type specified:

- If the format type is "string", the function should return an array of strings formatted as "Title by Author (Years)", where "Years" is a comma-separated list of years when the book was published.
- If the format type is "object", the function should return an array of objects, each object containing title, author, and a new property years which is an array of years.

Starting Code

```
function mergeAndFormat(books, format) {
    // Your code here
}
```

Sample Input 1

```
const books = [
    { title: "The Great Gatsby", author: "F. Scott Fitzgerald", year:
1925 },
    { title: "The Great Gatsby", author: "F. Scott Fitzgerald", year:
2020 },
    { title: "1984", author: "George Orwell", year: 1949 },
    { title: "1984", author: "George Orwell", year: 1983 }
];
const format = "string";
mergeAndFormat(books, format)
```

Sample Output 1

```
[
    "The Great Gatsby by F. Scott Fitzgerald (1925, 2020)",
    "1984 by George Orwell (1949, 1983)"
]
```

Sample Input 2

```
const books = [
    { title: "To Kill a Mockingbird", author: "Harper Lee", year:
1960 },
    { title: "To Kill a Mockingbird", author: "Harper Lee", year:
2015 },
    { title: "Brave New World", author: "Aldous Huxley", year: 1932
},
    { title: "The Catcher in the Rye", author: "J.D. Salinger", year:
1951 }
];
const format = "object";
mergeAndFormat(books, format)
```

Sample Output 2

```
[
    { title: "To Kill a Mockingbird", author: "Harper Lee", years:
[1960, 2015] },
    { title: "Brave New World", author: "Aldous Huxley", years:
[1932] },
    { title: "The Catcher in the Rye", author: "J.D. Salinger",
years: [1951] }
]
```