

## W06

### P1: students array demo using map, filter, find, reduce

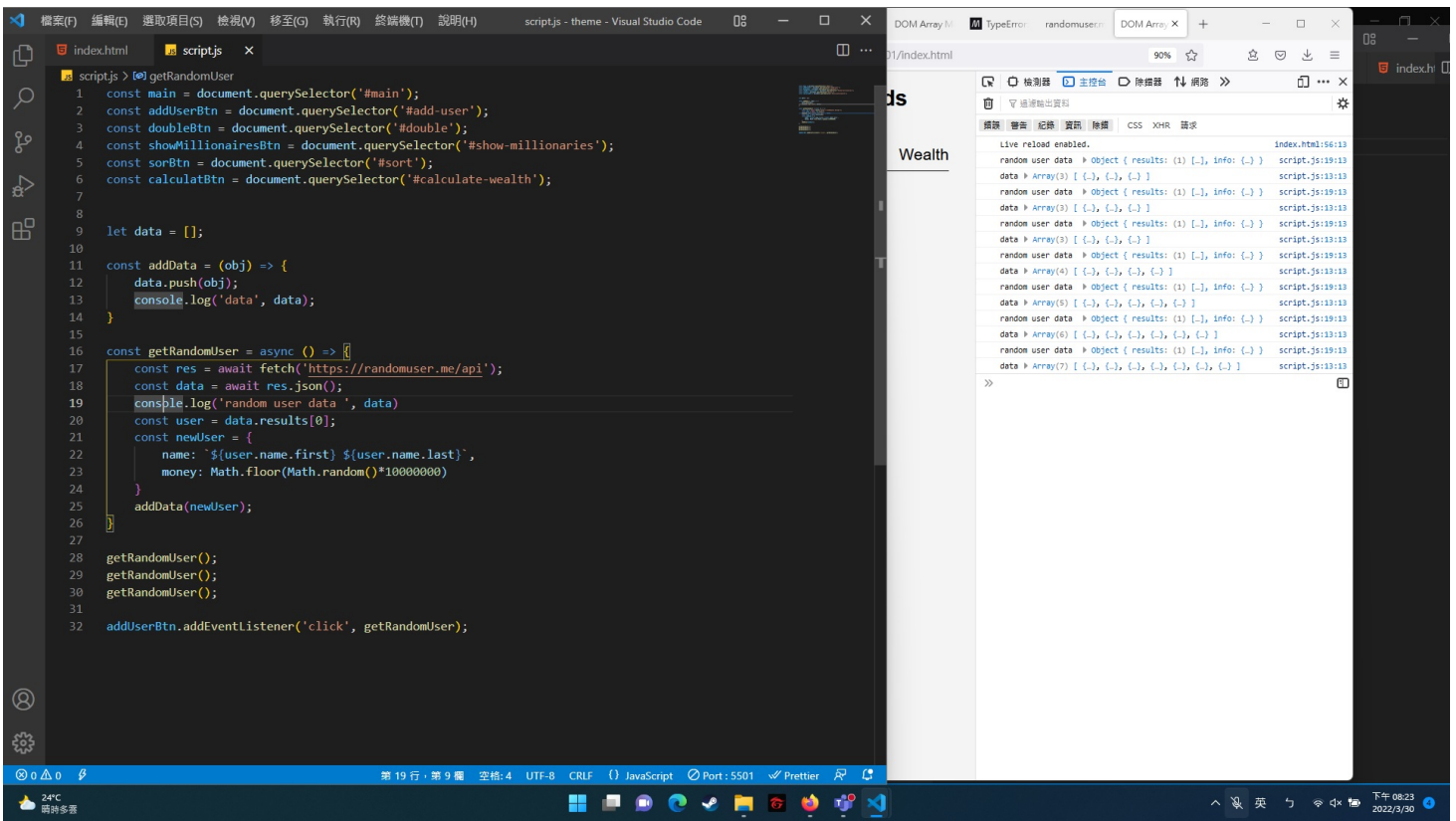
The screenshot shows a development environment with VS Code on the left and a web browser on the right. The VS Code editor displays a file named `app.js` with the following JavaScript code:

```
1  // ...
2  console.log('updateStudents', updateStudents);
3
4  const highScores = students.filter((student) => {
5
6  });
7
8  console.log('highScores', highScores);
9
10
11
12  if (student.score > 85) {
13    return student;
14  }
15
16  });
17
18  console.log('highScores', highScores);
19
20
21  const specificId = students.find( (student) => {
22    return student.id === 1;
23  });
24
25  console.log('specificId', specificId);
26
27  const averageScore = students.reduce((scoreTotal, student) => {
28    //console.log('student', student);
29    //console.log('scoreTotal', scoreTotal);
30    return scoreTotal + student.score;
31  }, 0 ) / students.length;
32
33  console.log('averageScore', averageScore);
34
35  const survey = students.reduce((survey, student) => {
36    //console.log('favoriteCourse', student.favoriteCourse);
37    const favCourse = student.favoriteCourse;
38
39    if( survey[favCourse]){
40      survey[favCourse] = survey[favCourse] + 1;
41    }else{
42      survey[favCourse]= 1;
43    }
44    return survey;
45  }, {});
```

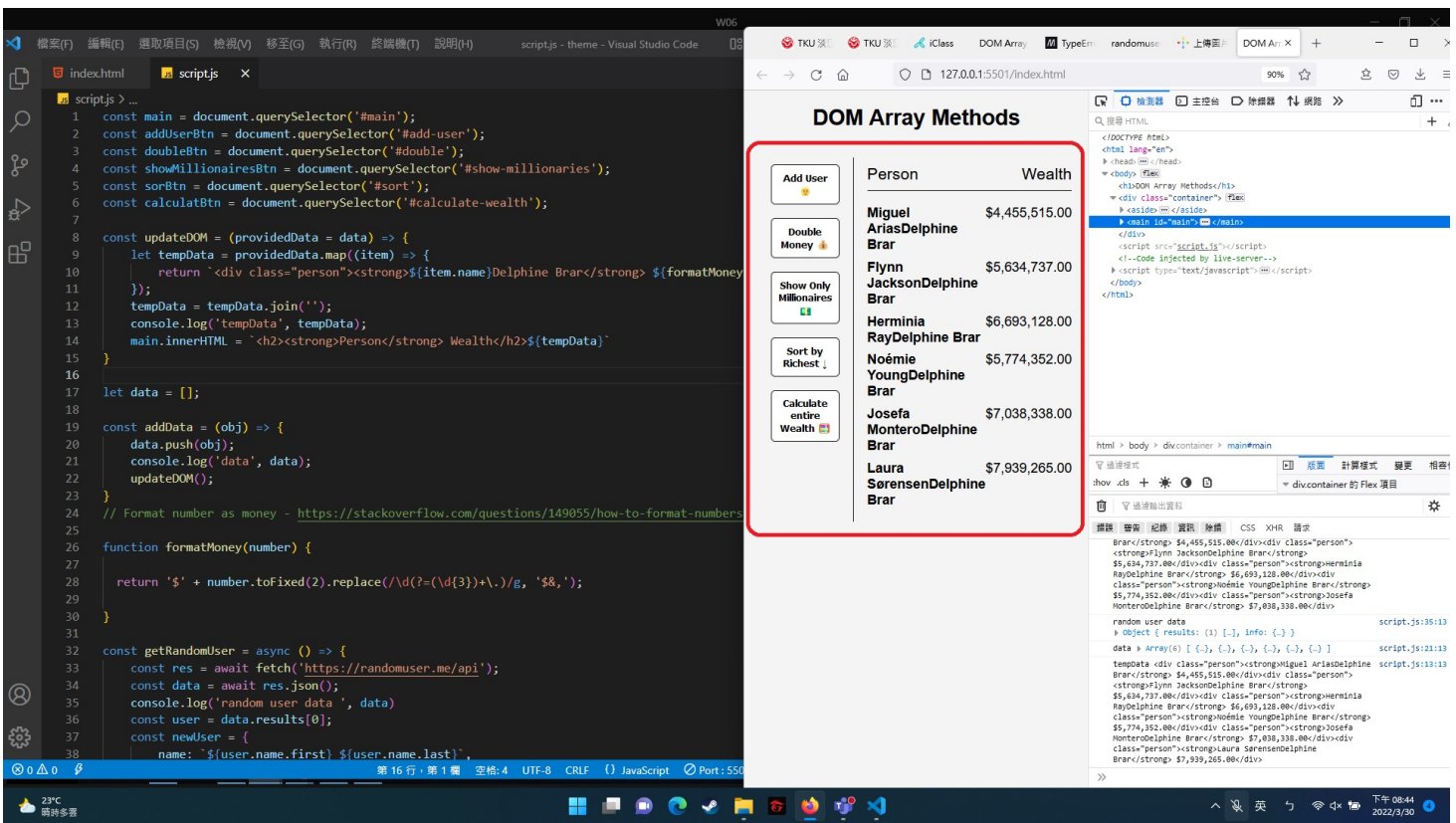
The web browser on the right shows the console output for the `index.html` file at `127.0.0.1:5500/index.html`. The output includes the following data:

- `Object { id: 1, name: "JaSi", score: 80, favoriteCourse: "C++" }` (app.js:4)
- `Object { id: 2, name: "JaSi-2", score: 50, favoriteCourse: "JS" }` (app.js:4)
- `Object { id: 3, name: "JaSi-3", score: 30, favoriteCourse: "JAVA" }` (app.js:4)
- `Object { id: 4, name: "JaSi-4", score: 100, favoriteCourse: "C++" }` (app.js:4)
- `Object { id: 5, name: "JaSi-5", score: 90, favoriteCourse: "python" }` (app.js:4)
- `updateStudents > Array(5) [ (.), (.), (.), (.), (.) ]` (app.js:18)
- `highScores > Array [ (.), (.) ]` (app.js:18)
- `specificId > Object { id: 1, name: "JaSi", score: 80, favoriteCourse: "C++" }` (app.js:25)
- `averageScore > 70` (app.js:33)
- `survey > Object { undefined: 5 }` (app.js:47)
- `Live reload enabled.` (index.html:41)

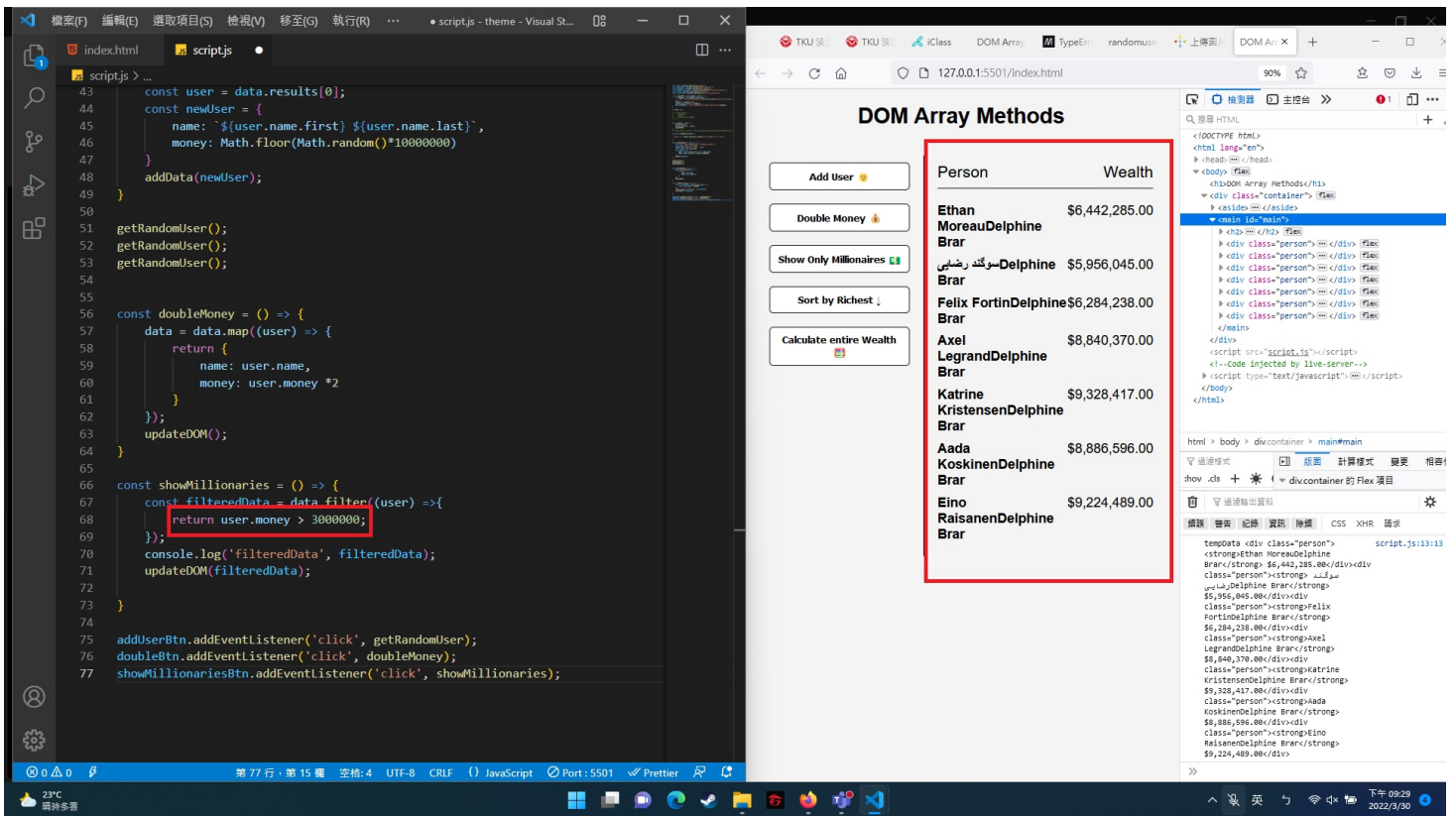
### P2: getRandomUser three times



## P3: add 6 users to the DOM



## P4: add 6 users first, then filter condition set to > 30000000



P5

