

第一題

The image shows a web browser on the left and a code editor on the right. The browser's address bar shows `127.0.0.1:5500/index.html`. A Google Translate popup is visible over the browser content. The console shows the following output:

```
Most number of native speakers!chinese 209410769
Most number of native speakers!mandarin 209410769
2nd place in number of native speakers Spanish 209410769
Great language too english 209410769
Number 4 Hindi 209410769
5th most spoken language arabic 209410769
Great language too japan 209410769
```

The code editor shows the following JavaScript code:

```
1 //The switch Statement
2
3 function showMessage (language, id){
4     switch (language) {
5         case 'chinese':
6             case 'mandarin':
7                 console.log('Most number of native speakers!${language} ${id}');
8                 break;
9
10                case 'Spanish':
11                    console.log('2nd place in number of native speakers ${language} ${id}');
12                    break;
13
14                case 'English':
15                    console.log('3rd place ${language} ${id}');
16                    break;
17
18                case 'Hindi':
19                    console.log('Number 4 ${language} ${id}');
20                    break;
21
22                case 'arabic':
23                    console.log('5th most spoken language ${language} ${id}');
24                    break;
25
26                default: //for all other simply log:
27                    console.log('Great language too ${language} ${id}')
28            }
29
30
31
32 const id = '209410769'
33 showMessage('chinese', id);
34 showMessage('mandarin', id);
35 showMessage('Spanish', id);
36 showMessage('english', id);
37 showMessage('Hindi', id);
38 showMessage('arabic', id);
39 showMessage('japan', id);
40
41
```

第二題

The image shows a web browser on the left and a code editor on the right. The browser displays a blank white page at the URL `127.0.0.1:5500/index.html`. The code editor shows a JavaScript file `script-w03-769.js` with the following code:

```
32 const id = '209410769'
33 showMessage('chinese',id);
34 showMessage('mandarin',id);
35 showMessage('spanish',id);
36 showMessage('english',id);
37 showMessage('hindi',id);
38 showMessage('arabic',id);
39 showMessage('japan',id);
40 */
41
42
43 //The conditional ternary operator
44
45 let averagePopulation = 33
46
47 //use if else if
48 function showMessage2(country,population){
49     if(population<averagePopulation){
50         console.log(`${country}'s population (${population}) is above average (${averagePopulation})`)
51     }else if(population>averagePopulation){
52         console.log(`${country}'s population (${population}) is below average (${averagePopulation})`)
53     }else{
54         console.log(`${country}'s population (${population}) is equal to average (${averagePopulation})`)
55     }
56 }
57
58 //use ternary operator
59
60 function showMessage3(country,population){
61     let compare = (population<averagePopulation ? 'below':
62         (population>averagePopulation ? 'above': 'equal'))
63     console.log(`${country}'s population (${population}) is ${compare} to average (${averagePopulation})`)
64 }
65
66
67 showMessage2('Taiwan',23.29)
68 showMessage3('Taiwan',23.29)
69 showMessage2('USA',350.29)
70 showMessage3('USA',350.29)
71 showMessage2('Some',33)
72 showMessage3('Some',33)
```

The browser's console shows the following output:

```
Taiwan's population (23.29) is above average (33)
Taiwan's population (23.29) is below to average (33)
USA's population (350.29) is below average (33)
USA's population (350.29) is above to average (33)
Some's population (33) is equal to average (33)
Some's population (33) is equal to average (33)
```

第三題

The image shows a web browser on the left and a code editor on the right. The browser's address bar shows the URL `127.0.0.1:5500`. The console displays three log messages from `script-w03-769.js`:

```
The bill was 275,the tip was 41.25,and the total value 316.25
The bill was 40,the tip was 8,and the total value 48
The bill was 430,the tip was 86,and the total value 516
```

The code editor shows the following JavaScript code:

```
59
60 showMessage2('Taiwan',23,29)
61 showMessage2('USA',350,29)
62 showMessage2('Some',33)
63 //use ternary operator
64
65 function showMessage3(country,population){
66   let compare = (population<averagePopulation ? 'below':
67                 (population>averagePopulation ? 'above': 'equal'))
68   console.log(`${country}'s population (${population}) is ${compare}`)
69 }
70
71
72 showMessage3('Taiwan',23,29)
73 showMessage3('USA',350,29)
74 showMessage3('Some',33)
75
76
77
78 //Code challenge
79
80
81
82 function tipCalculator(bill){
83   let tip =( bill>=50&&bill<=300? bill*0.15 : bill*0.2 );
84   let pay=bill+tip;
85   return ('The bill was ${bill},the tip was ${tip},and the total value is ${pay}')
86 }
87
88 console.log(tipCalculator(275));
89 console.log(tipCalculator(40));
90 console.log(tipCalculator(430));
91
92
93
94
95
96 //Arrow Function
97
98 let averagepopulation =33;
99 function showMessage3(country,population) {
100   let compare =(population < averagepopulation ? 'below':
101                 (population>averagepopulation)? 'above': 'equal to')
102   console.log(`${country}'s population${population} is ${compare} average population is ${averagepopulation}`)
103 }
```

第四題

The screenshot displays a web browser window on the left and a code editor on the right. The browser shows a blank white page. The code editor contains a JavaScript file named `script-w03-769.js` with the following code:

```
89 console.log(tipCalculator(40));
90 console.log(tipCalculator(430));
91
92
93
94 let averagepopulation = 33;
95 function showMessage3(country, population) {
96     let compare = (population < averagepopulation ? 'below':
97                 (population > averagepopulation) ? 'above': 'equal to')
98     console.log(`${country}'s population${population} is ${compare} av
99 }
100
101
102 function showMessage4(country, population) {
103     let compare = (population < averagepopulation ? 'below':
104                 (population > averagepopulation) ? 'above': 'equal to')
105     console.log(`${country}'s population${population} is ${compare} av
106 }
107
108
109 showMessage3('Taiwan', 23.29)
110 showMessage4('Taiwan', 23.29)
111 showMessage3('USA', 350.29)
112 showMessage4('USA', 350.29)
113 showMessage3('Some', 33)
114 showMessage4('some', 33)
115
116 function tipCalculator(bill){
117     let tip = (bill >= 50 && bill <= 300 ? bill * 0.15 : bill * 0.2);
118     return(`the bill was${bill}, the tip was${tip}, and the total value
119 }
120
121 console.log(tipCalculator(275));
122 console.log(tipCalculator(48));
123 console.log(tipCalculator(40));
124
125
126 console.log('arrow', tipCalculator(275));
127 console.log('arrow', tipCalculator(40));
128 console.log('arrow', tipCalculator(430));
```

The browser's console shows the following output:

```
Taiwan's population23.29 is below average (33) script-w03-769.js:98
Taiwan's population23.29 is below average (33) script-w03-769.js:105
USA's population350.29 is above average (33) script-w03-769.js:98
USA's population350.29 is above average (33) script-w03-769.js:105
Some's population33 is equal to average (33) script-w03-769.js:98
some,33's populationundefined is equal to average (33) script-w03-769.js:105
the bill was275, the tip was41.25, and the total value 316.25 script-w03-769.js:121
the bill was48, the tip was9.600000000000001, and the total value 57.6 script-w03-769.js:122
the bill was430, the tip was86, and the total value 516 script-w03-769.js:123
arrow the bill was275, the tip was41.25, and the total value 316.25 script-w03-769.js:126
arrow the bill was40, the tip was8, and the total value 48 script-w03-769.js:127
arrow the bill was430, the tip was86, and the total value 516 script-w03-769.js:128
> Spanish|
```

第五題

The screenshot displays a web browser window on the left and a code editor on the right. The browser shows a blank white page at the URL `127.0.0.1:5500/index.html`. The code editor shows the `script-w03-769.js` file with the following JavaScript code:

```
119     let tip =(bill >=50 && bill <=300 ? bill *0.15 :bill*0.2);
120     return('the bill was${bill}, the tip was${tip},and the total value
121 }
122
123 console.log(tipCalculator(275));
124 console.log(tipCalculator(48));
125 console.log(tipCalculator(430));
126
127
128 console.log('arrow',tipCalculator(275));
129 console.log('arrow' ,tipCalculator(40));
130 console.log('arrow',tipCalculator(430));
131
132 */
133
134 const describeCountry =(country,population,capitalCity)=>{
135     return ('${country}has ${population} people and its capital city is
136
137
138 console.log(describeCountry('Taiwan',23.29,'Taipei'));
139 console.log(describeCountry('USA',350.29,'Washington'));
140 console.log(describeCountry('Japan',126.5,'tokyo'));
```

The browser's console shows the output of the JavaScript code:

```
Taiwanhas 23.29 people and its capital city is Taipei script-w03-769.js:138
USAhas 350.29 people and its capital city is Washington script-w03-769.js:139
Japanhas 126.5 people and its capital city is tokyo script-w03-769.js:140
> Spanish
```