

1. Problem : Sort Character

```
1  "use strict";
2
3  const inputan1 = "Sample Case";
4  const inputan2 = "Next Case";
5
6  const sort = (inputan) => {
7      const vow = ["a", "i", "u", "e", "o"];
8      let vowel = [];
9      let consonant = [];
10
11     for (let huruf of inputan) {
12         for (let vocal of vow) {
13             if (huruf.toLowerCase() == vocal.toLowerCase()) {
14                 if (vowel.length == 0) {
15                     vowel.push(huruf.toLowerCase());
16                     huruf = " ";
17                 } else {
18                     let i = 0;
19                     for (; i < vowel.length; i++) {
20                         if (vowel[i] == huruf) {
21                             vowel[i + 1] = huruf.toLowerCase();
22                             break;
23                         }
24                     }
25                     vowel[i + 1] = huruf.toLowerCase();
26                     huruf = " ";
27                 }
28             }
29         }
30         if (huruf != " ") {
31             consonant.push(huruf.toLowerCase());
32         }
33     }
34
35     console.log("🚀 ~ sort ~ vowel:", vowel.toString());
36     console.log("🚀 ~ sort ~ consonant:", consonant.toString());
37 };
38
39 sort(inputan1);
40 sort(inputan2);
41
```

```
Aditya@DESKTOP-JLV9LLC MINGW64 /c/Aditya/
● $ node sortCharacter.js
♣ ~ sort ~ vowel: a,a,e,e
♣ ~ sort ~ consonant: s,m,p,l,c,s
♣ ~ sort ~ vowel: e,e,a
♣ ~ sort ~ consonant: n,x,t,c,s
```

2. PSBB (Pembatasan Sosial Berskala Besar)

```
1  "use strict";
2
3  const readline = require("readline");
4
5  const rl = readline.createInterface({
6    input: process.stdin,
7    output: process.stdout,
8  });
9
10 const askQuestion = (question) => {
11   return new Promise((resolve) => rl.question(question, resolve));
12 };
13
14 const getFamiliesData = async () => {
15   let families = {};
16
17   const familyCount = await askQuestion("Input the number of families: ");
18   families.n = parseInt(familyCount);
19
20   const membersInput = await askQuestion(
21     "Input the number of members in the family (separated by a space): "
22   );
23   families.members = membersInput.split(" ").map(Number);
24
25   rl.close();
26
27   return families;
28 };
29
30 const busRequired = async () => {
31   try {
32     let families = await getFamiliesData();
33     if (families.n !== families.members.length) {
34       console.log("Input must be equal with count of family");
35       return;
36     }
37     let car = 0;
38
39     let arr = [];
40     let tempMembers = [...families.members];
41
42     // sorting data array
43     for (let i in tempMembers) {
44       let max = 0;
45       let maxIndex = -1;
46
47       for (let j = 0; j < tempMembers.length; j++) {
48         if (tempMembers[j] > max) {
49           max = tempMembers[j];
50           maxIndex = j;
51         }
52       }
53
54       if (maxIndex !== -1) {
55         arr.push(max);
56         tempMembers[maxIndex] = 0;
57       }
58     }
59     // console.log(arr);
60
61     // fulfill bus
62     let i = 0;
63     while (i < arr.length) {
64       if (arr[i] === 4) {
65         car++;
66         i++;
67       } else {
68         let found = false;
69         for (let j = i + 1; j < arr.length; j++) {
70           if (arr[i] + arr[j] <= 4) {
71             car++;
72             arr.splice(j, 1);
73             found = true;
74             break;
75           }
76         }
77         if (!found) {
78           car++;
79         }
80         i++;
81       }
82     }
83     console.log(`Minimum bus required is : ${car}`);
84   } catch (error) {
85     console.error("Error:", error);
86   }
87 };
88
89 busRequired();
```

```
Aditya@DESKTOP-JLV9LLC MINGW64 /c/Aditya/BootCamp/Project/Logic/test nawadata
• $ node psbb.js
Input the number of families: 5
Input the number of members in the family (separated by a space): 1 2 4 3 3
Minimum bus required is : 4

Aditya@DESKTOP-JLV9LLC MINGW64 /c/Aditya/BootCamp/Project/Logic/test nawadata
• $ node psbb.js
Input the number of families: 8
Input the number of members in the family (separated by a space): 2 3 4 4 2 1 3 1
Minimum bus required is : 5

Aditya@DESKTOP-JLV9LLC MINGW64 /c/Aditya/BootCamp/Project/Logic/test nawadata
• $ node psbb.js
Input the number of families: 5
Input the number of members in the family (separated by a space): 1 5
Input must be equal with count of family
```