COMP1531 | T09B / H17B

Week 2

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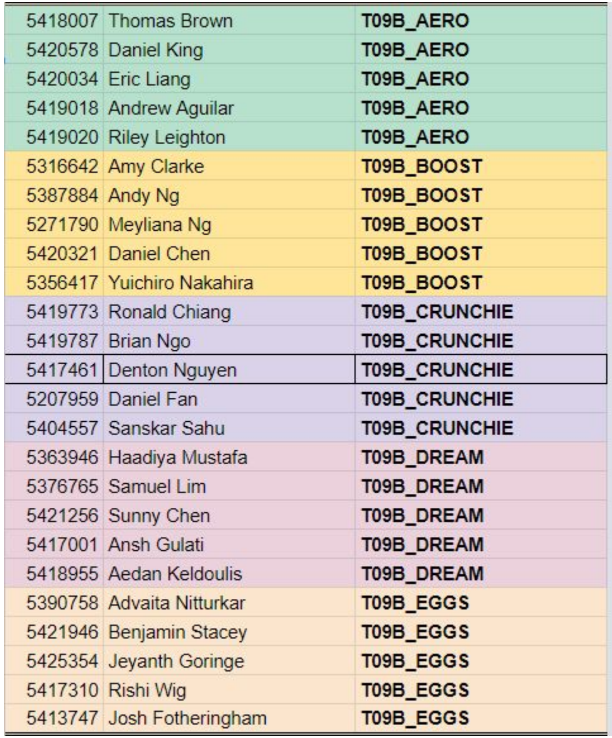
Learning objectives

- Reinforcing our understanding of **JavaScript**
- Resolving **merge conflicts**
- How to do well in this project as a Team
- Optional: Objects … maybe???

👨‍👩‍👧‍👦 T09B Finalised Groups



5418007	Thomas Brown	T09B_AERO
5420578	Daniel King	T09B_AERO
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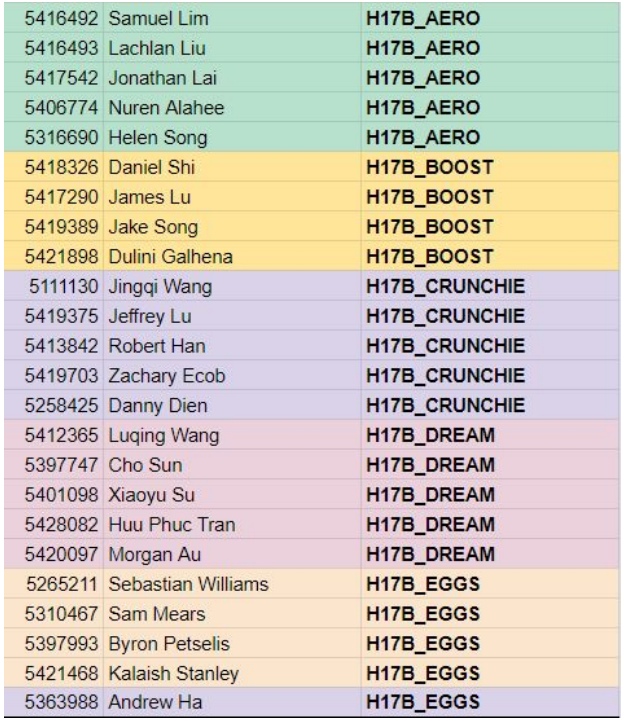
👨‍👩‍👧‍👦 H17B Finalised Groups



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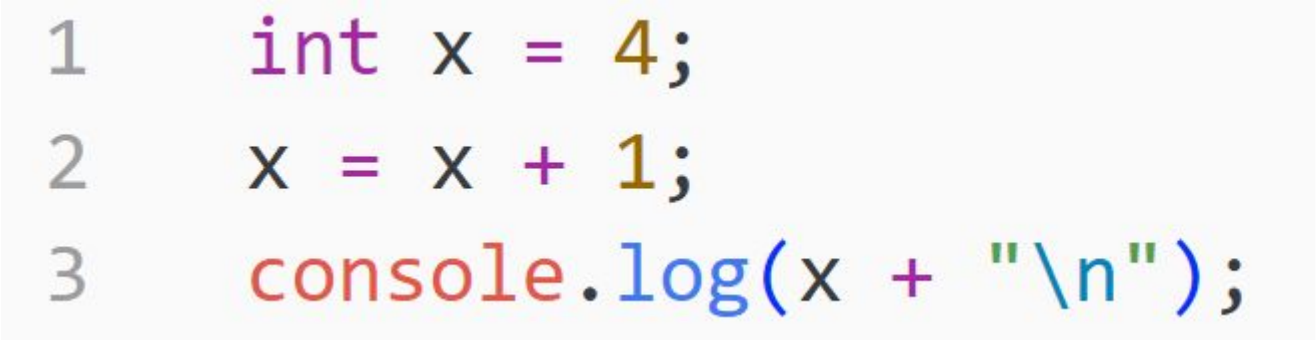
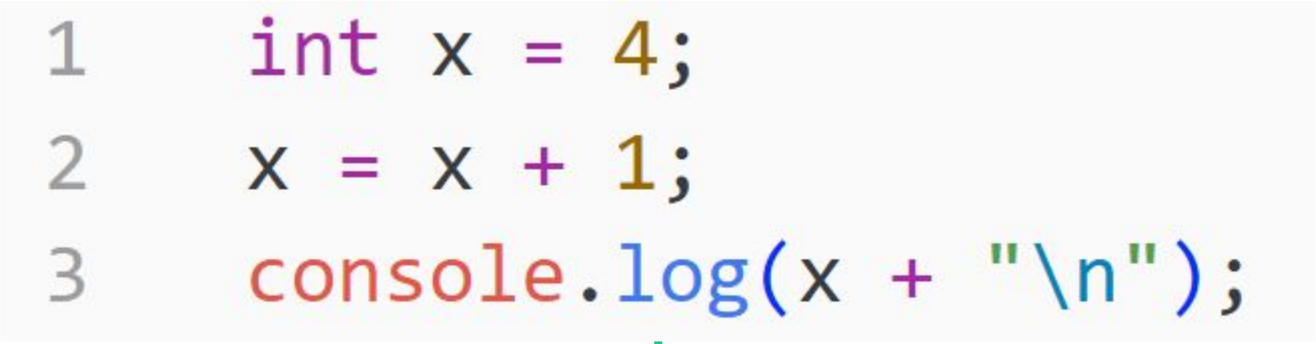
🏡PSA: Tutorial Marks

Attendance recorded starting Week 2

Tutorial participation and attendance contributes to your project mark



```
int x = 4;
x = x + 1;
console.log(x + "\n");
```



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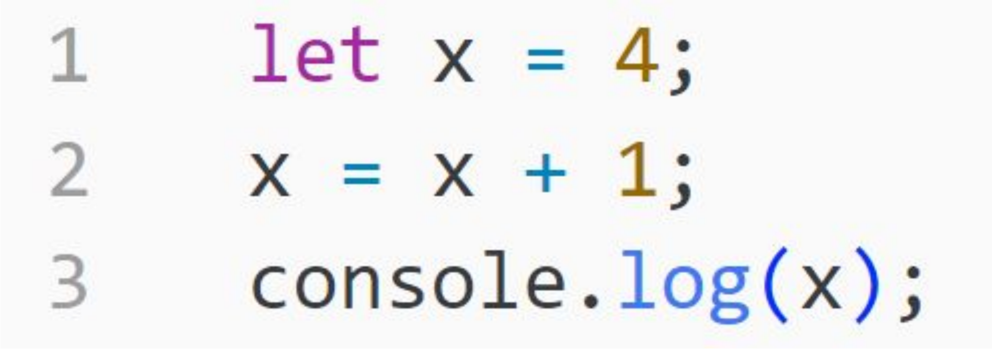
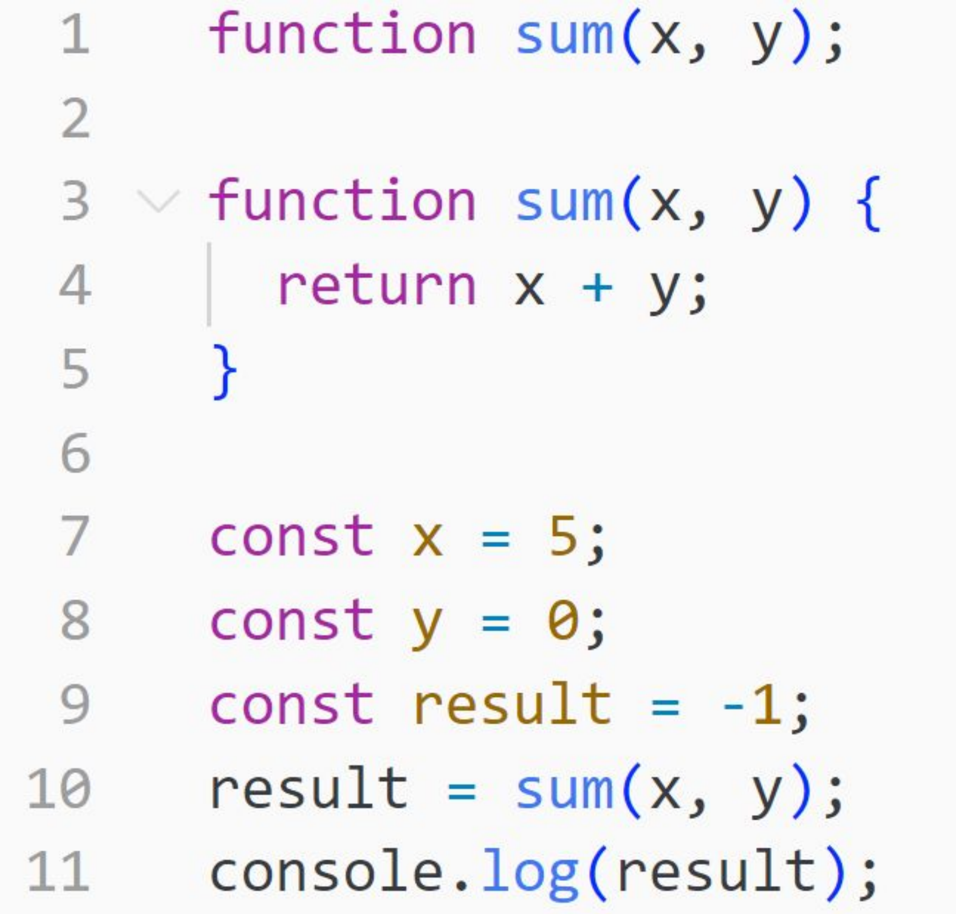
↓



✓

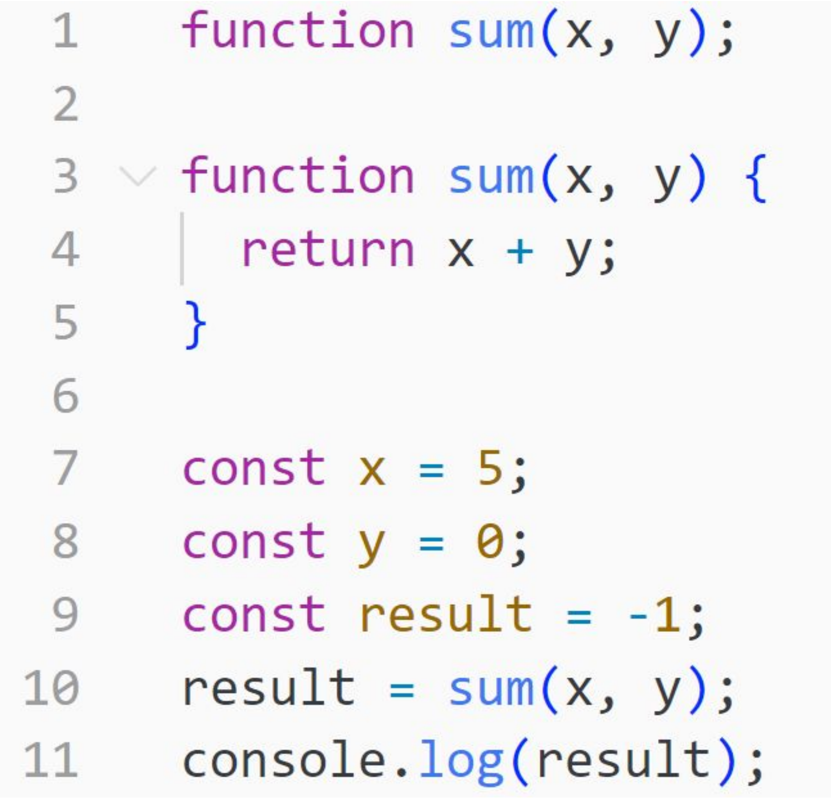
```
let x = 4;
x = x + 1;
console.log(x);
```



```javascript
function sum(x, y);

function sum(x, y) {
  return x + y;
}

const x = 5;
const y = 0;
const result = -1;
result = sum(x, y);
console.log(result);
```



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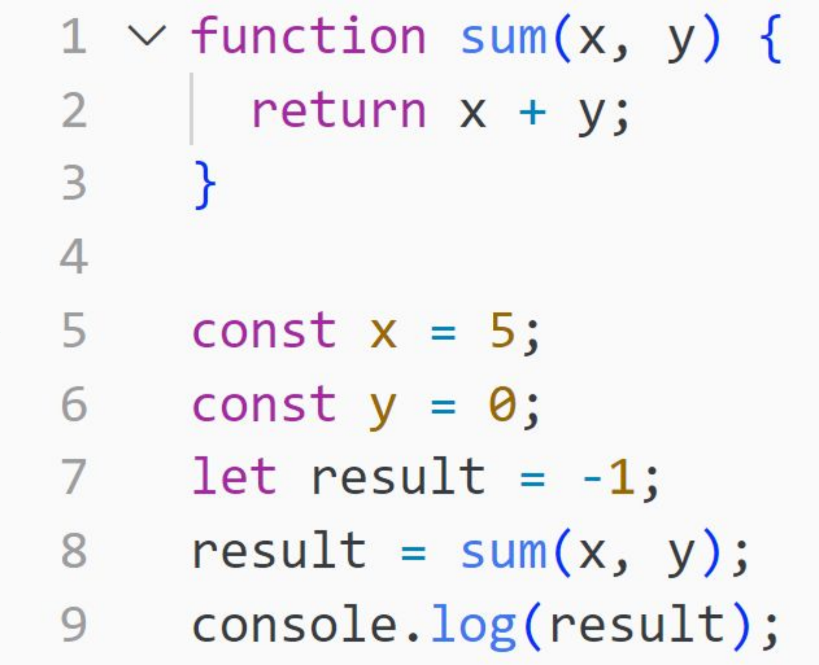

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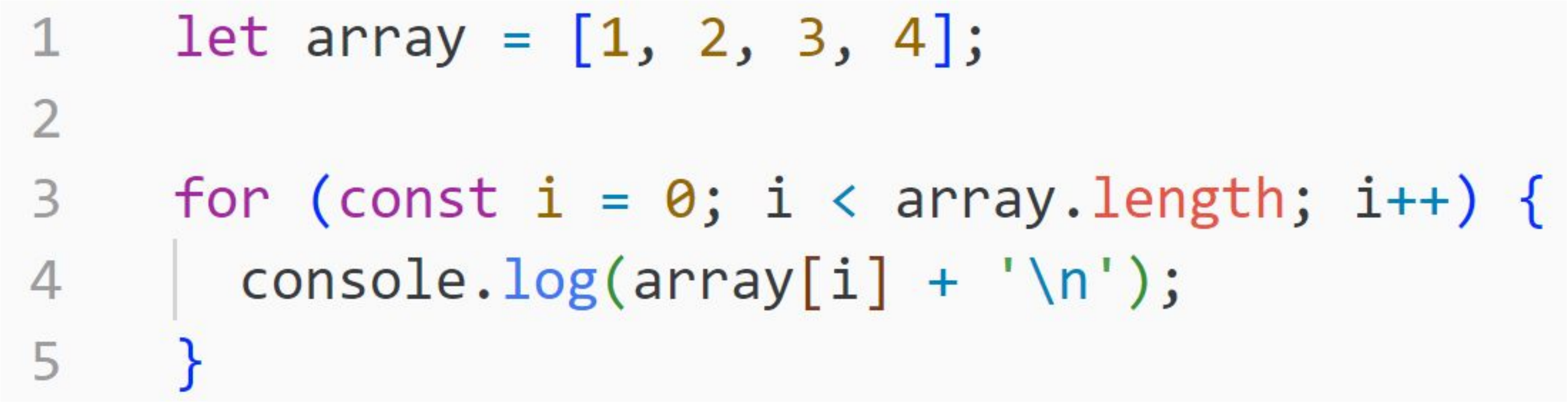
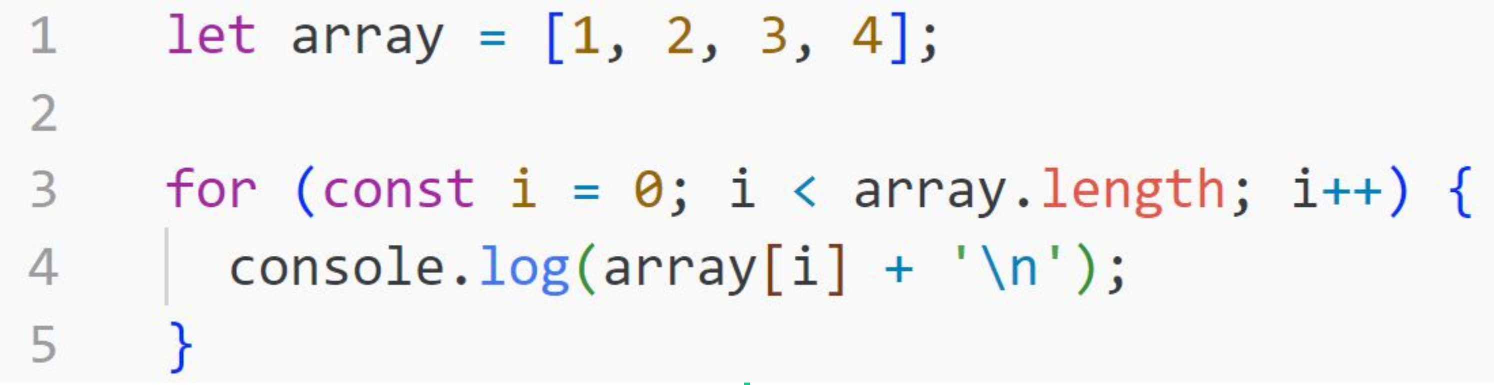


```
let array = [1, 2, 3, 4];

for (const i = 0; i < array.length; i++) {
  console.log(array[i] + '\n');
}
```



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```

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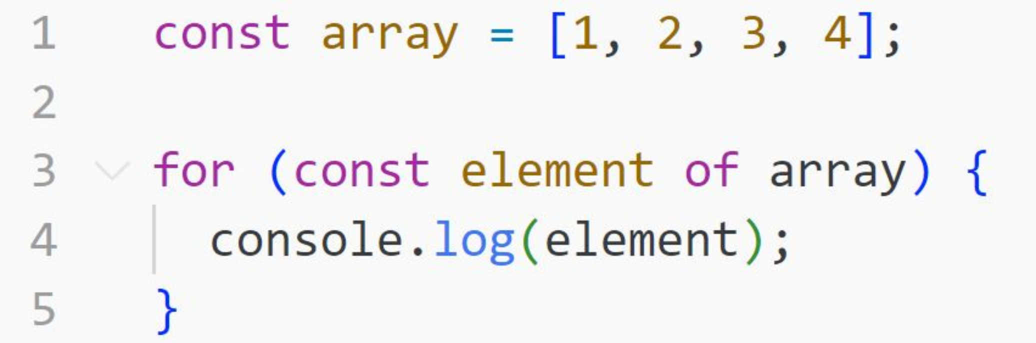
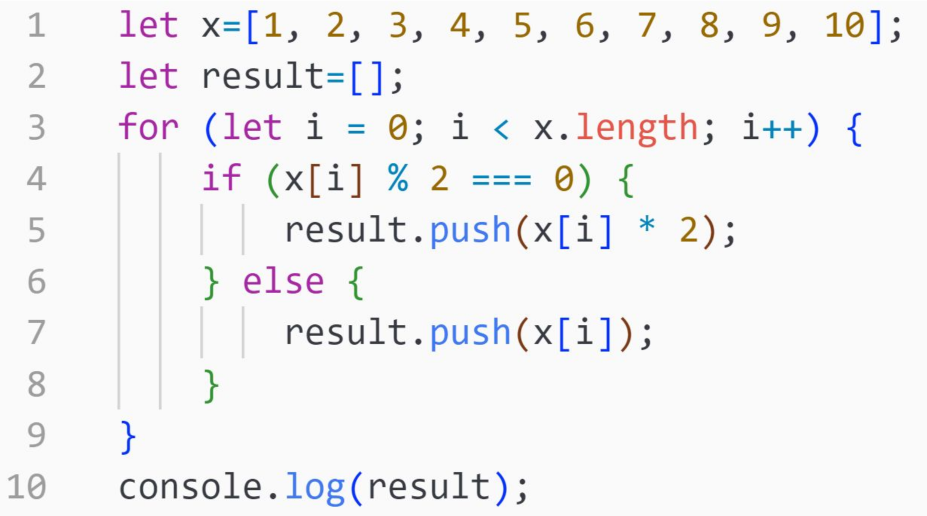


```
const array = [1, 2, 3, 4];

for (const element of array) {
  console.log(element);
}
```

Code Review



```
let x=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
let result=[];
for (let i = 0; i < x.length; i++) {
    if (x[i] % 2 === 0) {
        result.push(x[i] * 2);
    } else {
        result.push(x[i]);
    }
}
console.log(result);
```

In project groups, discuss the following:

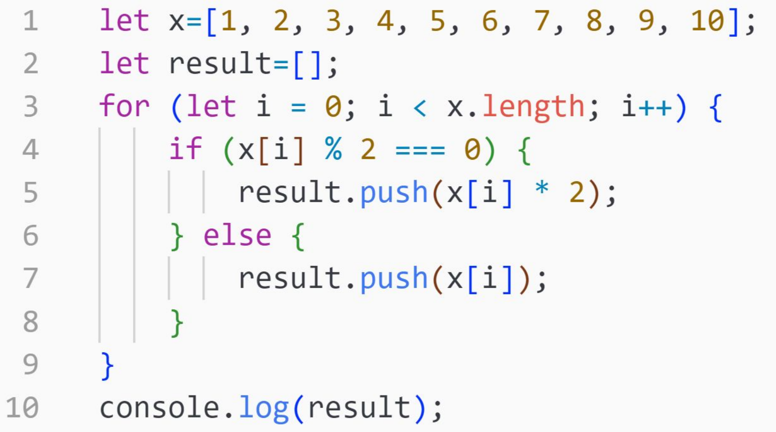
- What does the code do?
- How can the style be improved?
- How can we modify to code to be more ***javascripty?***

Once you have some ideas, try re-write the code using the JavaScript practices you discussed.

To run your program:

```
node <your_file_name>
```

🧠 Code Review: A better solution



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    } else {
        result.push(x[i]);
    }
}
console.log(result);
```
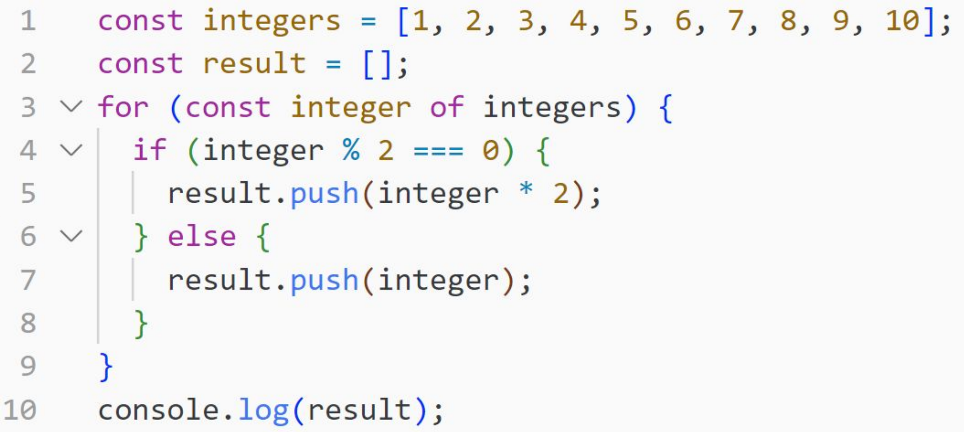
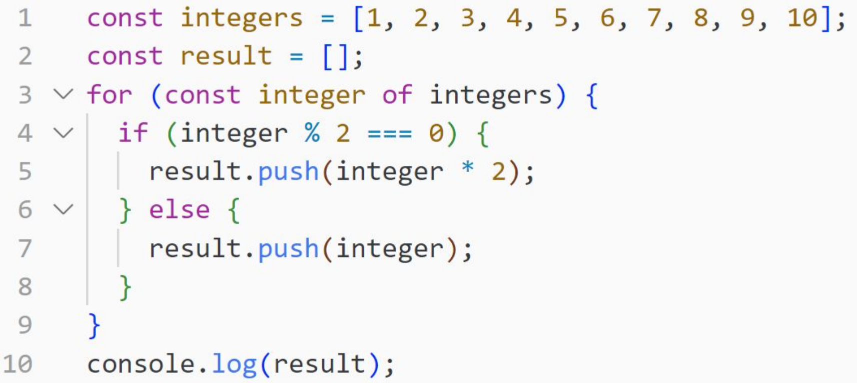
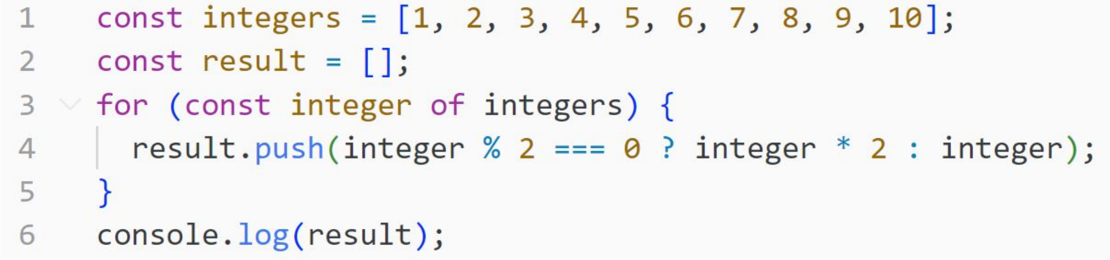



```javascript
const integers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
const result = [];
for (const integer of integers) {
  if (integer % 2 === 0) {
    result.push(integer * 2);
  } else {
    result.push(integer);
  }
}
console.log(result);
```

🧠 Code Review: An even better solution

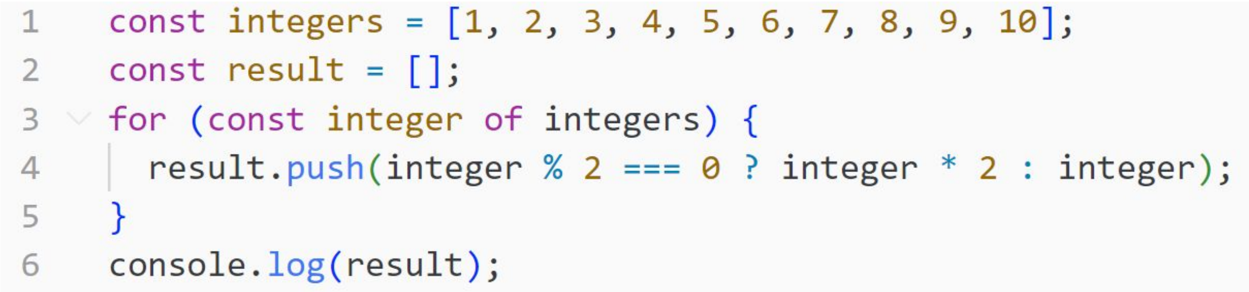


```javascript
const integers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
const result = [];
for (const integer of integers) {
  if (integer % 2 === 0) {
    result.push(integer * 2);
  } else {
    result.push(integer);
  }
}
console.log(result);
```

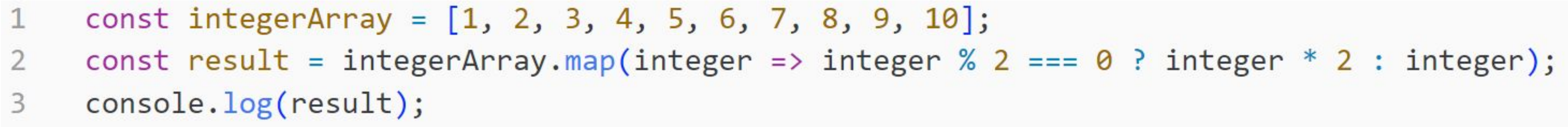


```javascript
const integers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
const result = [];
for (const integer of integers) {
  result.push(integer % 2 === 0 ? integer * 2 : integer);
}
console.log(result);
```

🧠 Code Review: The best solution (week 4)



```javascript
const integers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
const result = [];
for (const integer of integers) {
  result.push(integer % 2 === 0 ? integer * 2 : integer);
}
console.log(result);
```



```javascript
const integerArray = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
const result = integerArray.map(integer => integer % 2 === 0 ? integer * 2 : integer);
console.log(result);
```

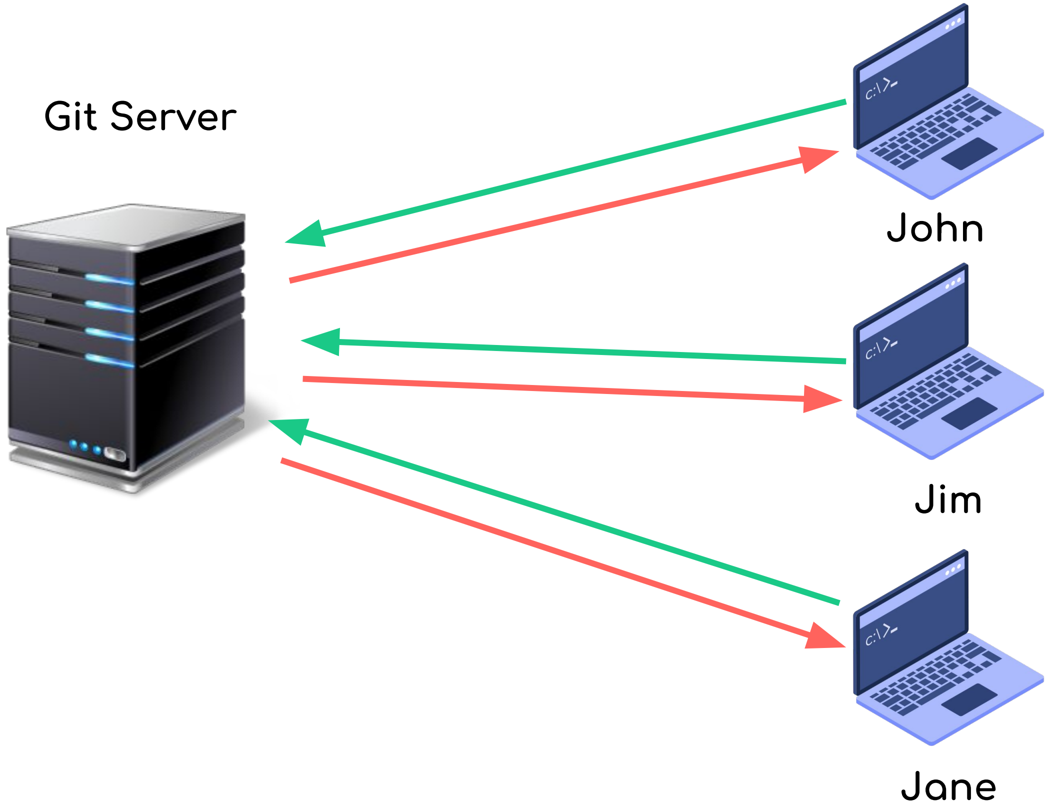
🌐 Git: An quick recap

`git clone <git_url>`	Downloads a Git Repository to your local computer
`git add <your_file.js>`	Take the 'added' files and record their changes, in preparation to be uploaded to Git
`git commit -m "your message"`	Take the 'added' files, and creates a snapshot of those files. They are now ready to be uploaded to Git.
`git push`	Uploads the 'added' files to Git
`git pull`	Downloads changed/new files from Git to your Local Computer

🌐 Git: An quick recap

← Push

→ Pull



authRegisterV1

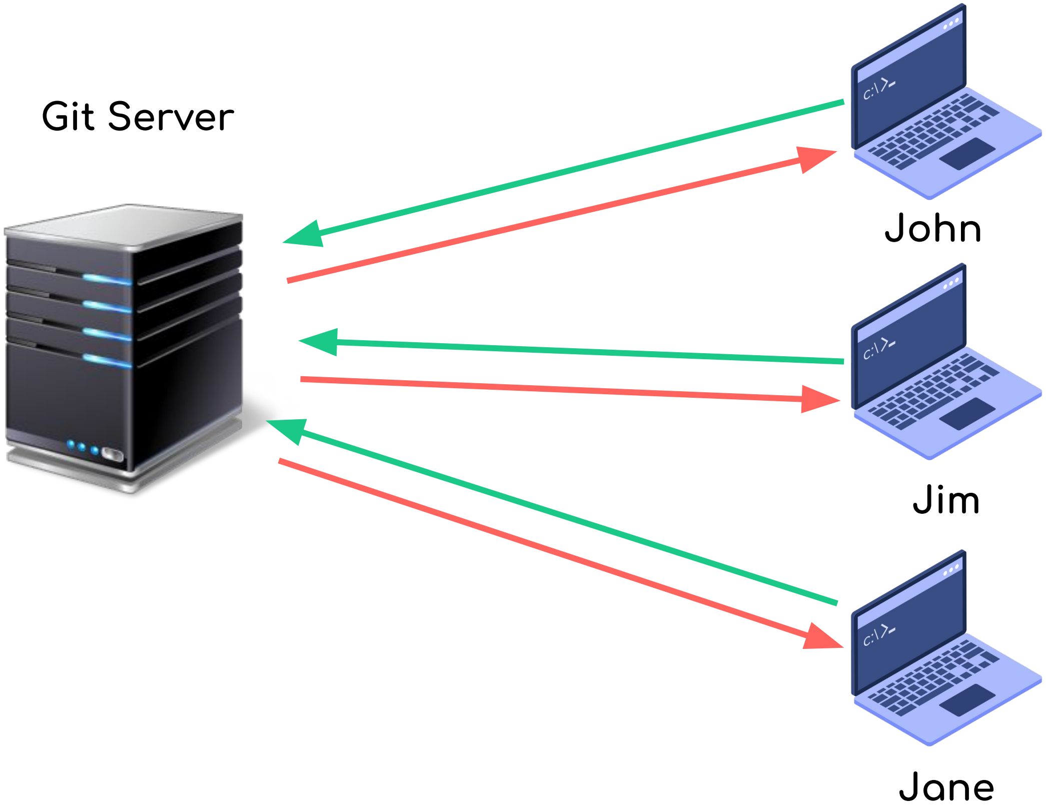
authLoginV1

channelDetailsV1

Git: Merge Conflicts

← Push

→ Pull



authRegisterV1

They are working on the same function 😲

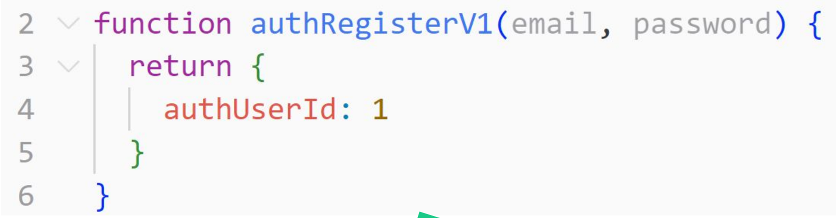
authRegisterV1

channelDetailsV1

Git: Merge Conflicts

John

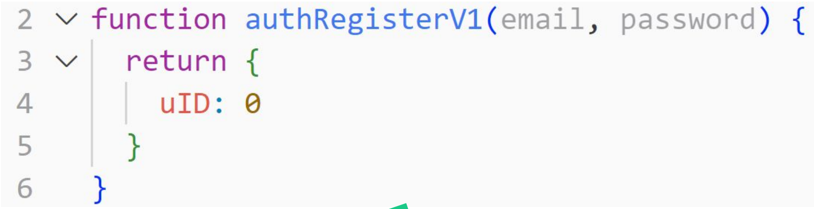
authRegisterV1



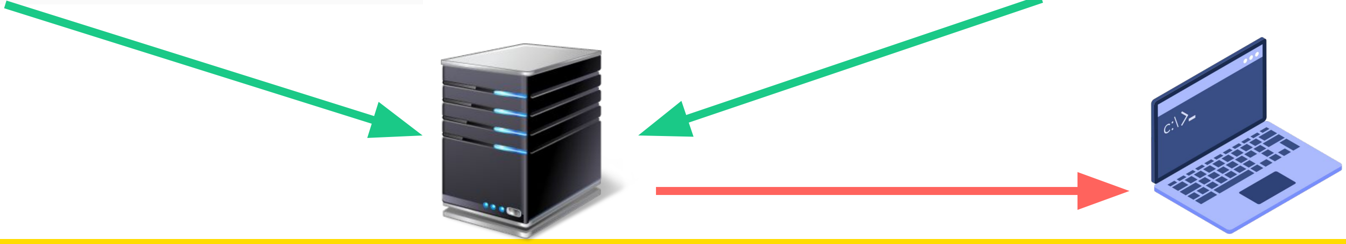
```
function authRegisterV1(email, password) {
  return {
    authUserId: 1
  }
}
```

Jim

authRegisterV1



```
function authRegisterV1(email, password) {
  return {
    uID: 0
  }
}
```

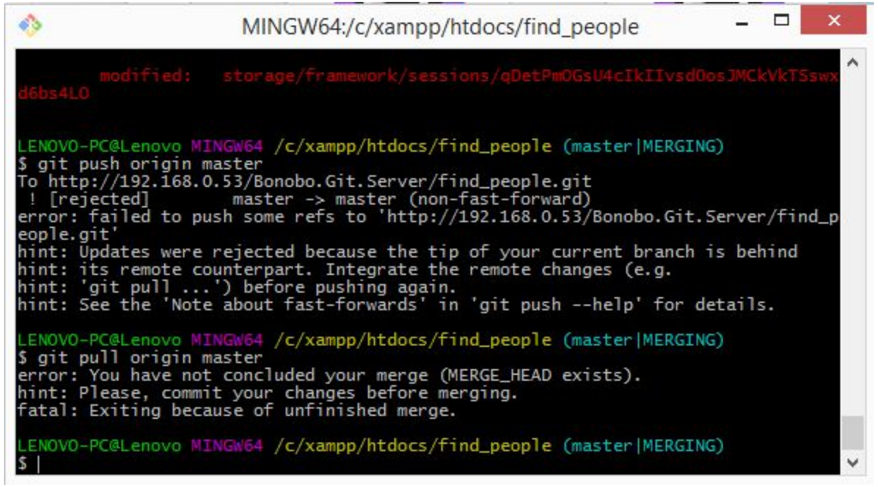


Git Server

Jane

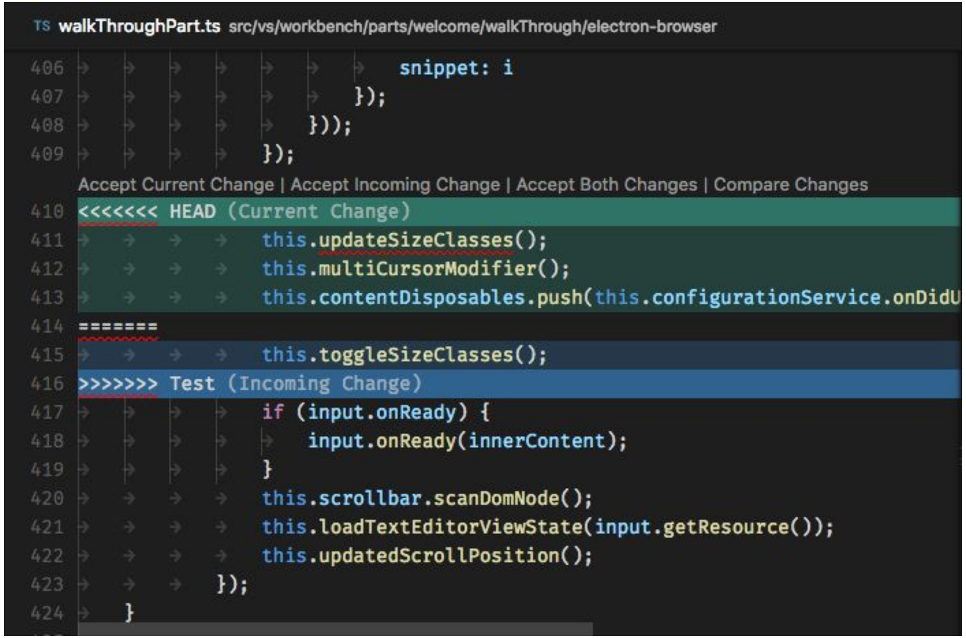
Git: Merge Conflicts

git push


MINGW64:/c/xampp/htdocs/find_people

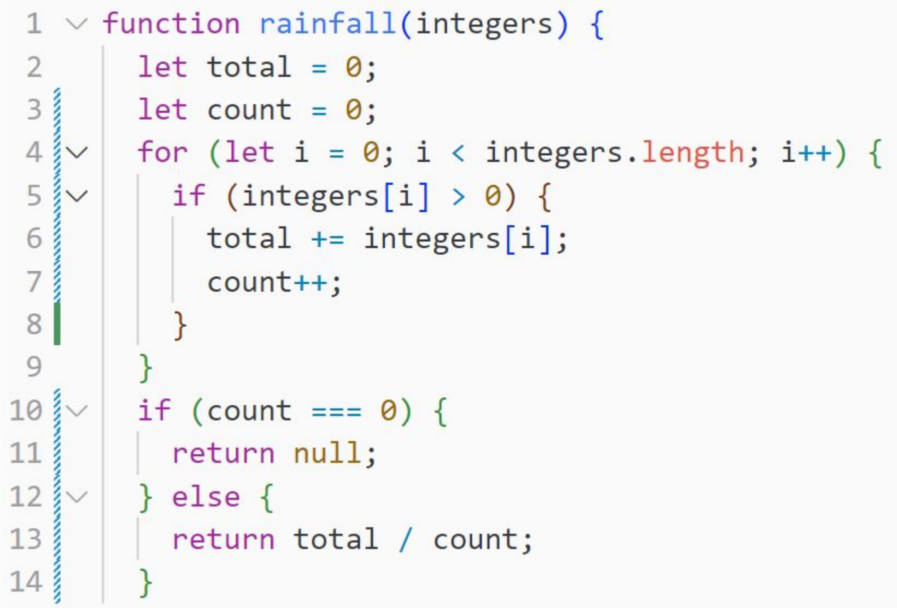
```
        modified:   storage/framework/sessions/qDetPmOGsU4cIkIIvsdOosJMCkVkTSswx
d6bs4LO


LENOVO-PC@Lenovo MINGW64 /c/xampp/htdocs/find_people (master|MERGING)
$ git push origin master
To http://192.168.0.53/Bonobo.Git.Server/find_people.git
 ! [rejected]          master -> master (non-fast-forward)
error: failed to push some refs to 'http://192.168.0.53/Bonobo.Git.Server/find_p
eople.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. Integrate the remote changes (e.g.
hint: 'git pull ...') before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.

LENOVO-PC@Lenovo MINGW64 /c/xampp/htdocs/find_people (master|MERGING)
$ git pull origin master
error: You have not concluded your merge (MERGE_HEAD exists).
hint: Please, commit your changes before merging.
fatal: Exiting because of unfinished merge.

LENOVO-PC@Lenovo MINGW64 /c/xampp/htdocs/find_people (master|MERGING)
$ |
```

git pull


TS walkThroughPart.ts src/vs/workbench/parts/welcome/walkThrough/electron-browser

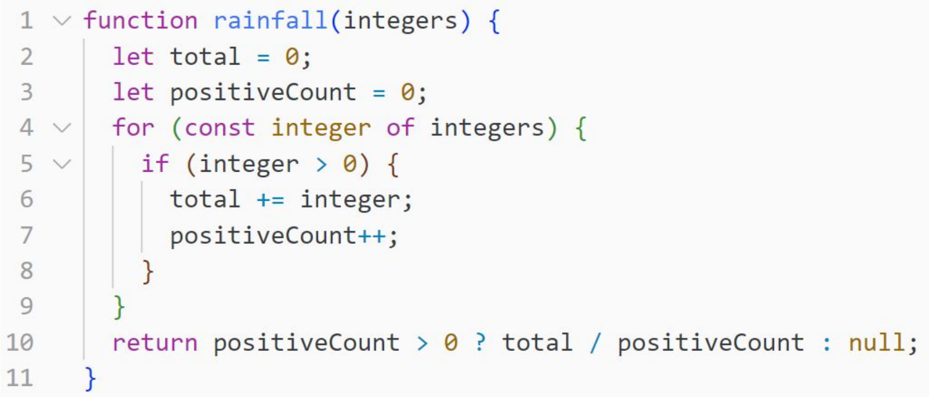
```
                            snippet: i
                        });
                    }));
                });
Accept Current Change | Accept Incoming Change | Accept Both Changes | Compare Changes
<<<<<<< HEAD (Current Change)
                this.updateSizeClasses();
                this.multiCursorModifier();
                this.contentDisposables.push(this.configurationService.onDidU
=======
                this.toggleSizeClasses();
>>>>>>> Test (Incoming Change)
                if (input.onReady) {
                    input.onReady(innerContent);
                }
                this.scrollbar.scanDomNode();
                this.loadTextEditorViewState(input.getResource());
                this.updatedScrollPosition();
            });
    }
```

main branch



```javascript
function rainfall(integers) {
  let total = 0;
  let count = 0;
  for (let i = 0; i < integers.length; i++) {
    if (integers[i] > 0) {
      total += integers[i];
      count++;
    }
  }
  if (count === 0) {
    return null;
  } else {
    return total / count;
  }
```

local branch



```javascript
function rainfall(integers) {
  let total = 0;
  let positiveCount = 0;
  for (const integer of integers) {
    if (integer > 0) {
      total += integer;
      positiveCount++;
    }
  }
  return positiveCount > 0 ? total / positiveCount : null;
}
```

🌐 Git: Merge Conflicts

1. Create a local branch

2. Create a file called `waterfall.js` in that local branch and add the '*for-of-loop*' code

3. Create a new file also called `waterfall.js` but in the master branch and add the '*for-index-loop*' code

4. On our local branch, we will **add, commit,** and **push,** the code

5. See what happens....

🏡 Teamwork Principles

Brainstorm a list of good and poor attributes for team members working on a project.

Suppose there is a member in a group who has gone silent and has yet to complete much of their assigned work. The reason is unknown.

- How should the remaining members approach the situation?
- What can groups do beforehand such that if this occurs, they can manage or minimise the impact?

🏡 Be a good team member !!!

📢 Communication

⏰ Time Management

💕 Honesty

📋 Responsibility

✨ Enthusiasm *(for your group + project!)*

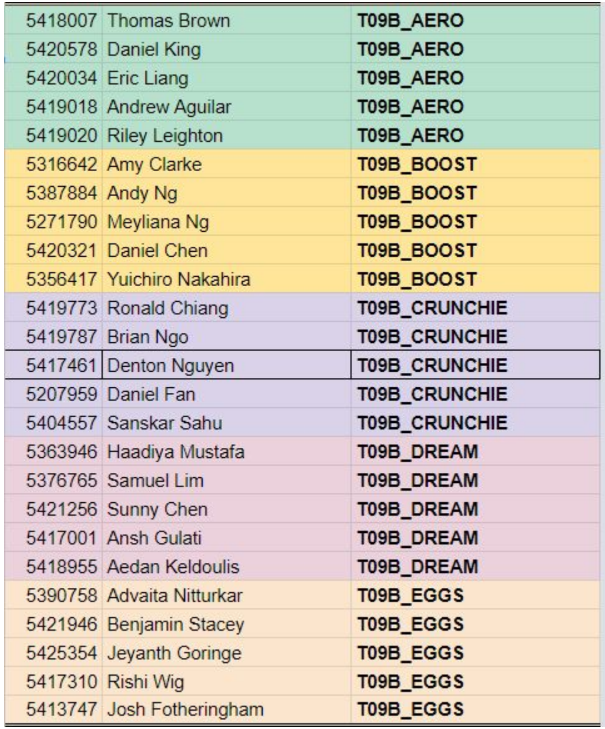
🏡 But what if...

A team member suddenly disappears without doing their work!

What should you do?

- Immediately notify tutor AND allocate the work to backup group member(s)
- Maintain contact with the group member (maybe a message a day)
  - Please don’t be aggressive
- Document it (in meeting minutes)

👨‍👩‍👧‍👦 T09B Lab Project Check-Ins



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10:20 - 10:40 AM

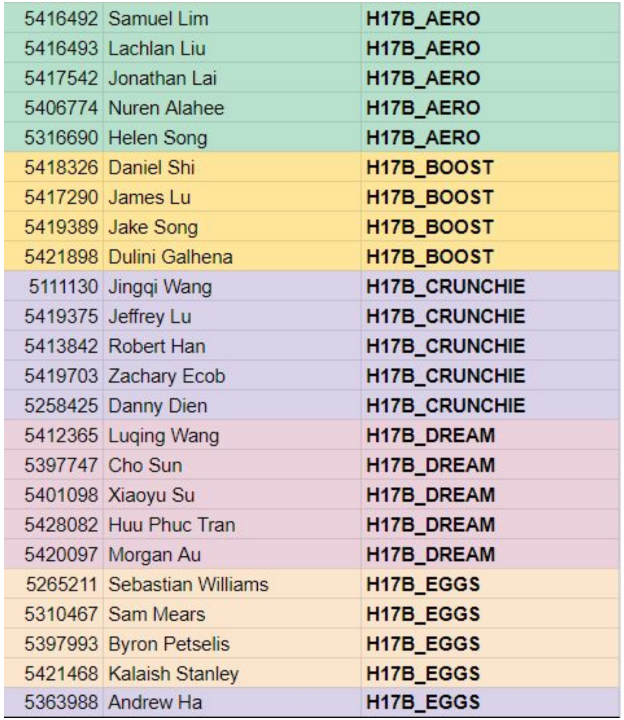
10:40 - 11:00 AM

11:00 - 11:20 AM

11:20 - 11:40 AM

11:40 - 12:00 PM

👨‍👩‍👧‍👦 H17B Lab Project Check-Ins



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6:20 - 6:40 PM

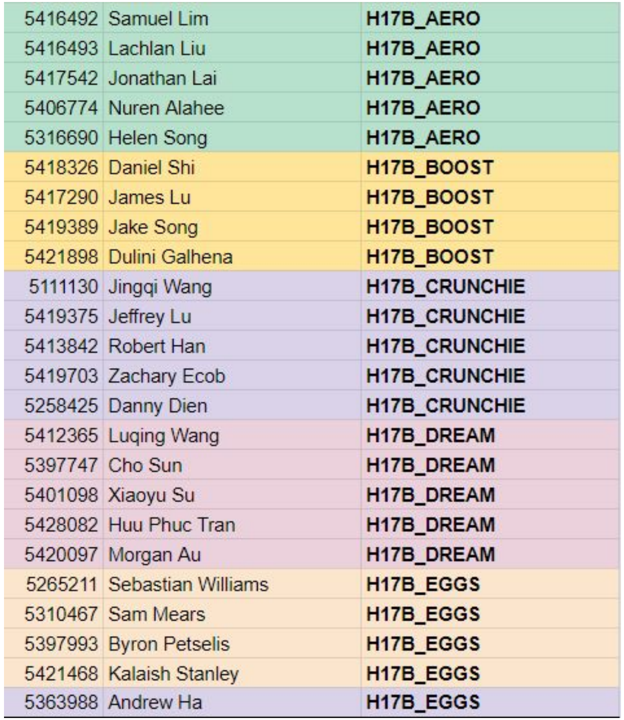
6:40 - 7:00 PM

7:00 - 7:20 PM

7:20 - 7:40 PM

7:40 - 8:00 PM

👨‍👩‍👧‍👦 H17B Holiday Lab Project Check-Ins



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5419375	Jeffrey Lu	H17B_CRUNCHIE
5413842	Robert Han	H17B_CRUNCHIE
5419703	Zachary Ecob	H17B_CRUNCHIE
5258425	Danny Dien	H17B_CRUNCHIE
5412365	Luqing Wang	H17B_DREAM
5397747	Cho Sun	H17B_DREAM
5401098	Xiaoyu Su	H17B_DREAM
5428082	Huu Phuc Tran	H17B_DREAM
5420097	Morgan Au	H17B_DREAM
5265211	Sebastian Williams	H17B_EGGS
5310467	Sam Mears	H17B_EGGS
5397993	Byron Petselis	H17B_EGGS
5421468	Kalaish Stanley	H17B_EGGS
5363988	Andrew Ha	H17B_EGGS

2:00 - 2:20 PM

2:20 - 2:40 PM

2:40 - 3:00 PM

3:00 - 3:20 PM

3:20 - 3:40 PM