Deakin University

Object Oriented Development

OnTrack Submission

Helping Your Peers

Submitted By:
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pstacey
2020/05/17 14:37

Tutor:
Dipto Pratyaksa

Outcome	Weight
Evaluate Code	♦♦◊◊◊
Principles	♦♦♦♦◊
Build Programs	♦♦◊◊◊
Design	♦♦◊◊◊
Justify	♦♦◊◊◊

In being able to assist others, an abilities to both understand the principles covered in the subject, and to explain them simply to others is needed. This directly aligns with the Principles outcome. Additionally, in doing this, assisting others often involves reading small snippets of code, interpreting errors, explaining designs and using graphics to help outline concepts. These aspects all relate to the other four outcomes.

May 17, 2020

SIT232 – Object Oriented Development Task 1.3D - Helping Others

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Student ID: 219011171

In helping others, my contributions have been both on the SIT232 forums of Cloud Deakin and on the SIT232 Teams site.

Since the start of Trimester I have participated in assisting on the Deakin Forums for almost every task. For example, the count of posts by forum area:

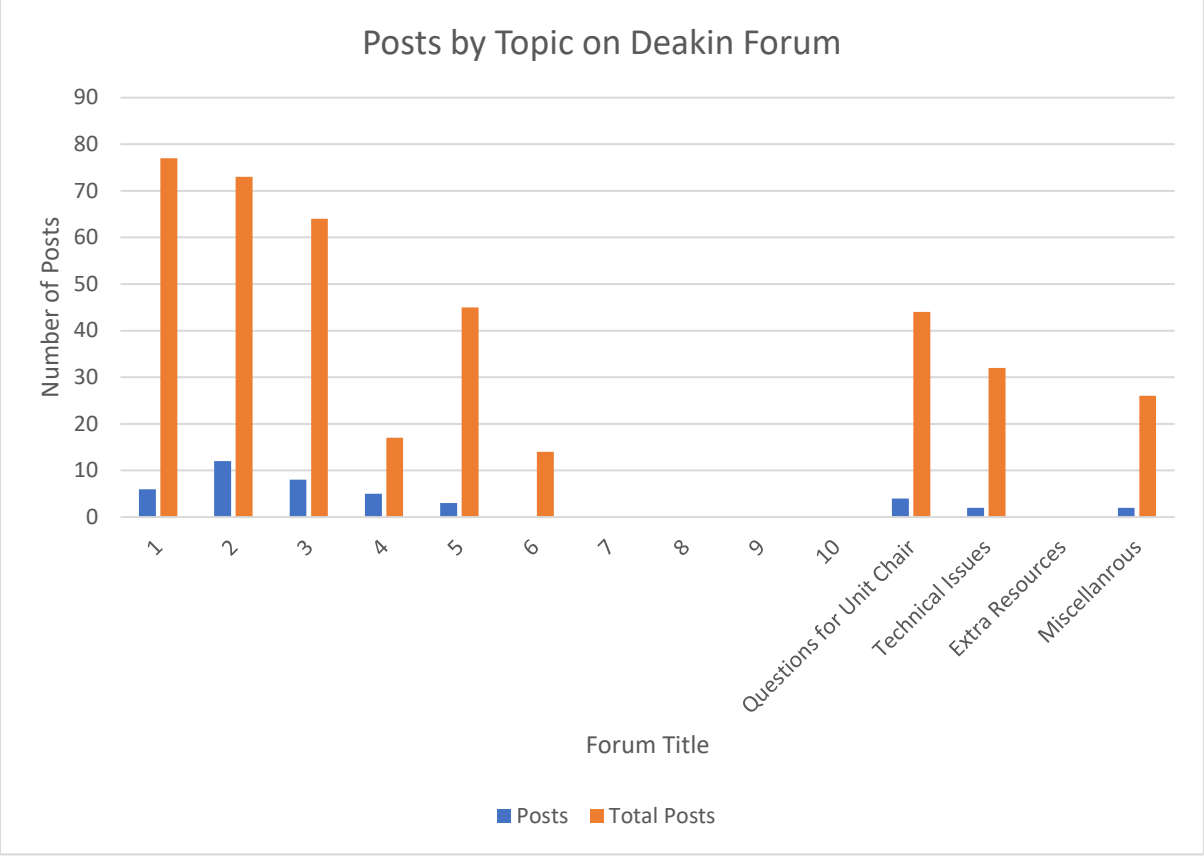
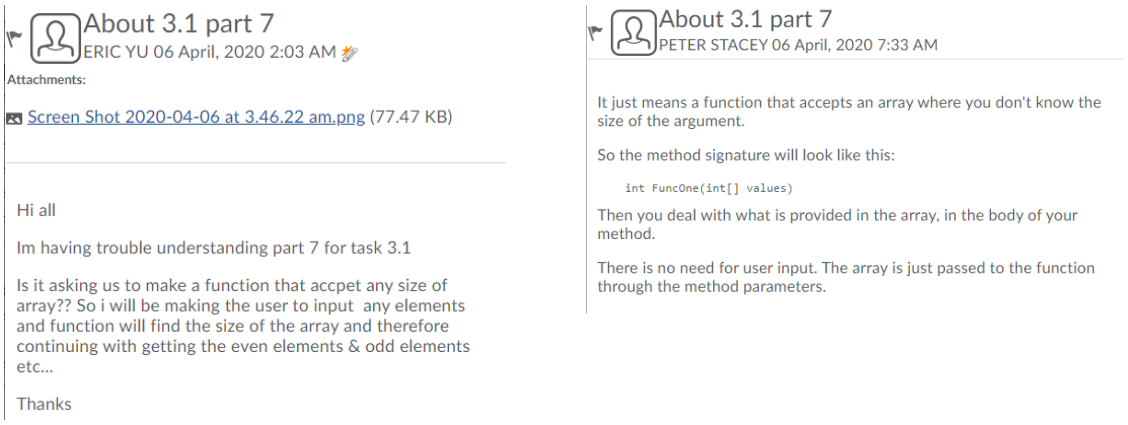


Figure 1: Involvement in discussion on the Deakin Forum

In some weeks, my contribution in terms of numbers of posts approached 30% of posts in a specific topic (ie. For the Week 4 discussion forum, my contribution is 30% of posts and for weeks 2 and 3, it's around the 15% of all posts contributed).

Volume of posts alone isn't necessarily a great indicator of usefulness, only of participation, however some example posts demonstrate the usefulness of the assistance provided:



About 3.1 part 7
ERIC YU 06 April, 2020 2:03 AM

Attachments:

Screen Shot 2020-04-06 at 3.46.22 am.png (77.47 KB)

Hi all

Im having trouble understanding part 7 for task 3.1

Is it asking us to make a function that accpet any size of array?? So i will be making the user to input any elements and function will find the size of the array and therefore continuing with getting the even elements & odd elements etc...

Thanks

About 3.1 part 7
PETER STACEY 06 April, 2020 7:33 AM

It just means a function that accepts an array where you don't know the size of the argument.

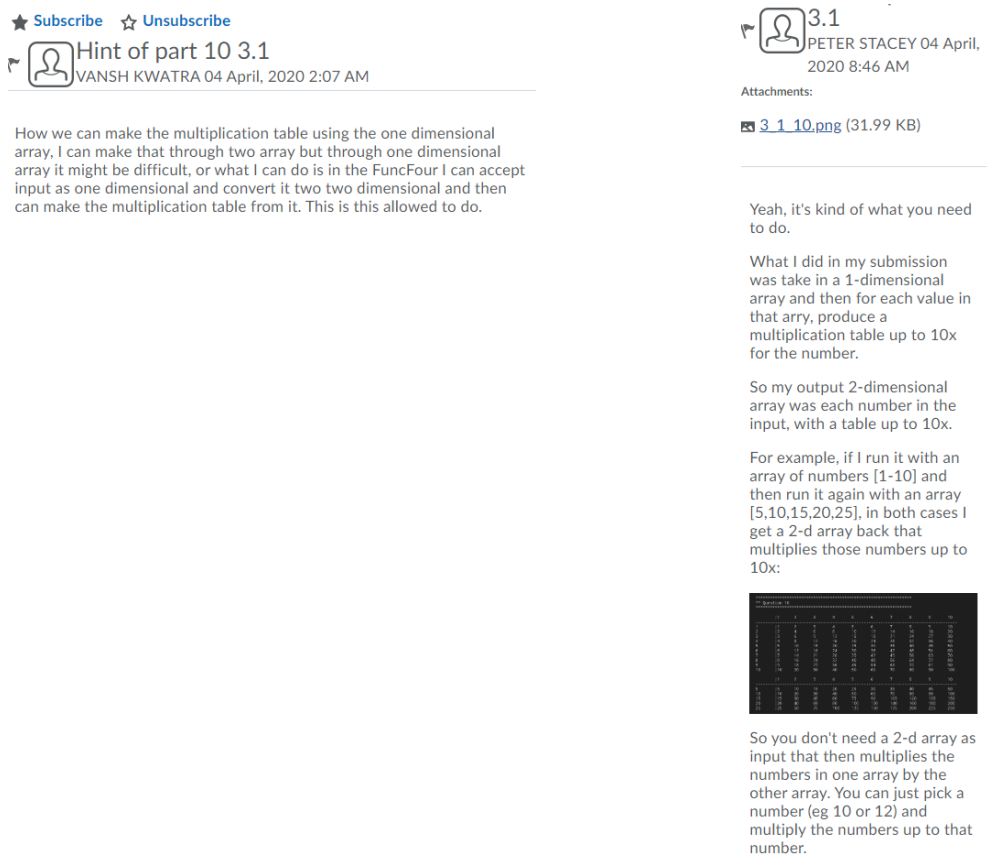
So the method signature will look like this:

```
int FuncOne(int[] values)
```

Then you deal with what is provided in the array, in the body of your method.

There is no need for user input. The array is just passed to the function through the method parameters.

In this example, I provide an example method signature to demonstrate the type of input required for the function, and directly answer the question. Additionally, as Eric indicated he was having difficulty understanding the requirement, I framed my reply by trying to explain the requirement in a new way, so that he had a second frame of reference to interpret the question from.



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Hint of part 10 3.1
VANSH KWATRA 04 April, 2020 2:07 AM

How we can make the multiplication table using the one dimensional array, I can make that through two array but through one dimensional array it might be difficult, or what I can do is in the FuncFour I can accept input as one dimensional and convert it two two dimensional and then can make the multiplication table from it. This is this allowed to do.

3.1
PETER STACEY 04 April, 2020 8:46 AM

Attachments:

3_1_10.png (31.99 KB)

Yeah, it's kind of what you need to do.

What I did in my submission was take in a 1-dimensional array and then for each value in that arry, produce a multiplication table up to 10x for the number.

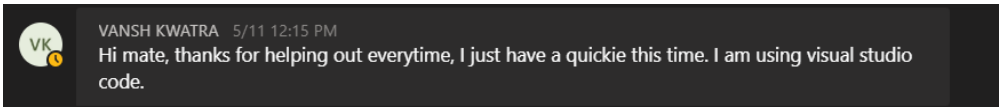
So my output 2-dimensional array was each number in the input, with a table up to 10x.

For example, if I run it with an array of numbers [1-10] and then run it again with an array [5,10,15,20,25], in both cases I get a 2-d array back that multiplies those numbers up to 10x:

So you don't need a 2-d array as input that then multiplies the numbers in one array by the other array. You can just pick a number (eg 10 or 12) and multiply the numbers up to that number.

In this example, I both provided an example of the output and my approach to solving the problem, as well as directly answered the query that Vansh had.

Of note, since we moved to Teams as a result of the move to online study for everyone, Vansh has continued to engage me privately in direct messages, to provide assistance as he found my assistance useful:



VANSH KWATRA 5/11 12:15 PM
Hi mate, thanks for helping out everytime, I just have a quickie this time. I am using visual studio code.

5.3 Tester Program
JAMES MARTIN 11 May, 2020 9:45 PM

I've found that the tester program seems to act differently from the supplied VS Studio App in 5.3.

More specifically the tester program frequently references the randomNumber variable. This is a reference to the random wait time after the timer starts. However I store my random number in my SimpleReactionController class. Changing the randomNumber in the tester class does not change it in the SimpleReactionController class.

Then when the tester class uses this new value to predict outcomes, my program acts differently than how it expects, because they are using two separate randomNumbers.

Additionally, I've noticed that the random number generation in the supplied VS App, and the Tester program is different. One merely returns randomNumber, the other returns a random number based on supplied parameters.

Would anyone be able to give me some direction as to how to understand this?

5.3 Tester Program
PETER STACEY 12 May, 2020 12:31 AM

None of the random numbers in the tester are random. They are all fixed, in the randomNumber variable.

Then, the RndGenerator.GetRandom method in lines 210-215 doesn't actually pick a random number. It just returns the number that has already been set, which guarantees that in your controller, the number you receive as the "random" number, is exactly the same as what the fixed value is.

The method has the same signature as the random generator expects, otherwise it wouldn't be an implementation of the interface and your controller wouldn't be able to call it. However internally it isn't using a random number at all.

So, your controller should behave exactly as expected, because it receives the pre-determined number, not a random one.

Hope that makes sense.

In this example, I evaluate the code we are provided in Task 5.3D, to explain how the tester is able to pass a non-random number to the controller, through the RngGenerator contained in the SimpleReactionMachine.cs class.

In all cases on the forum before we primarily moved to Teams, my posts attempted to assist, after first trying top understand the problem the person asking the question was having.

In addition, on the Discord site run by students, I've also contributed positively to answering questions.

For example:

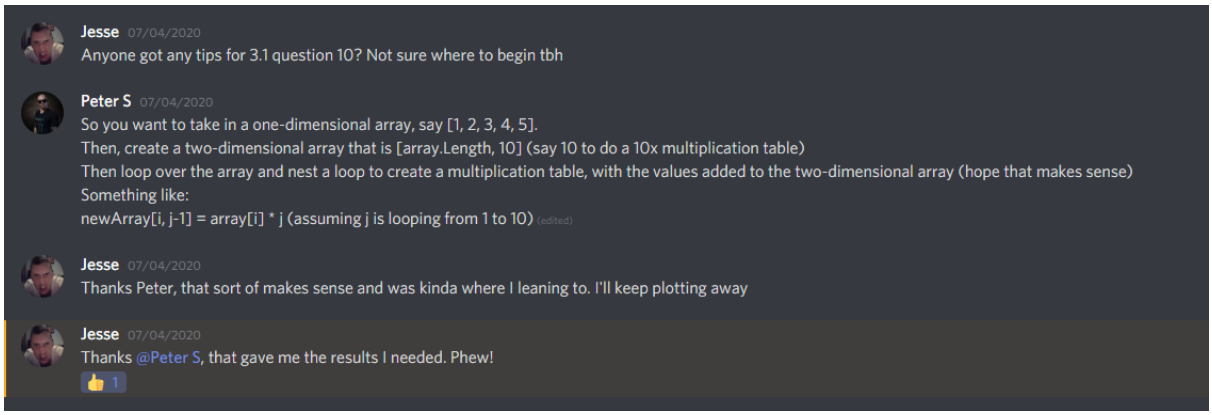


Figure 2: Example assistance provided on the student run Discord

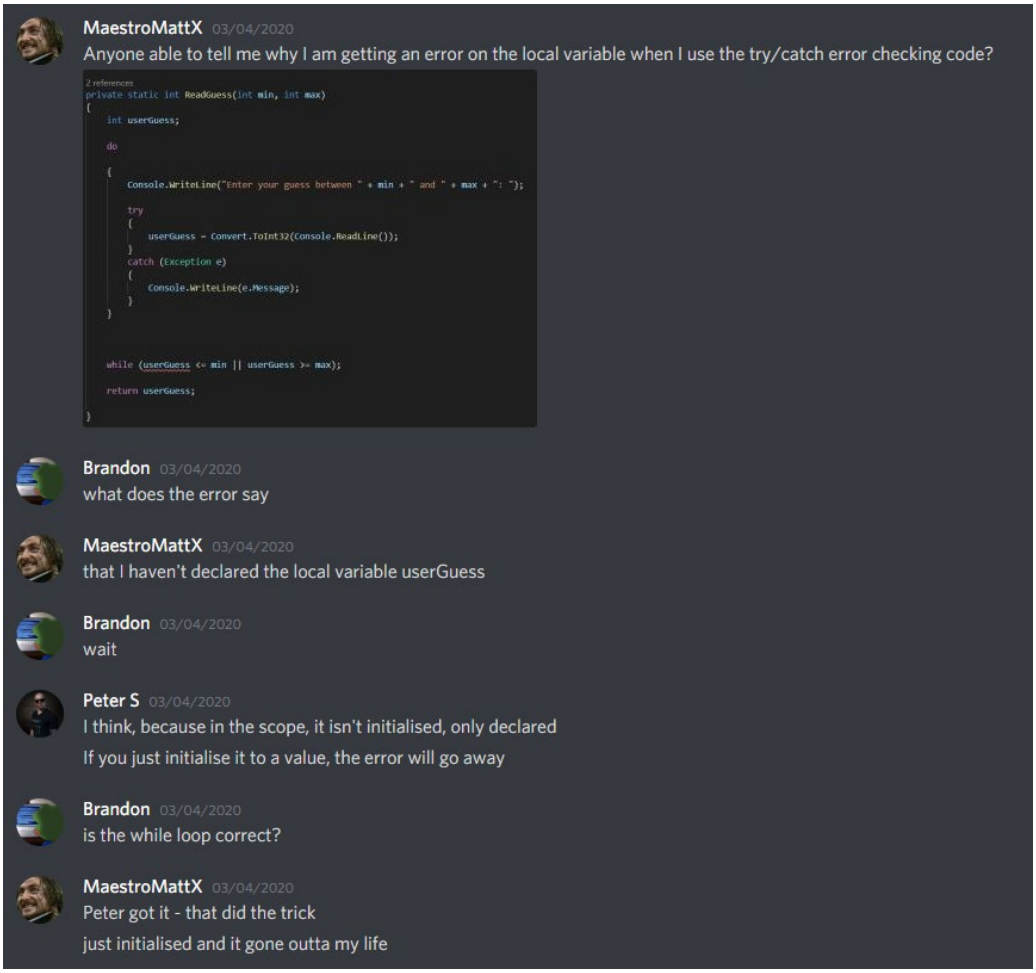
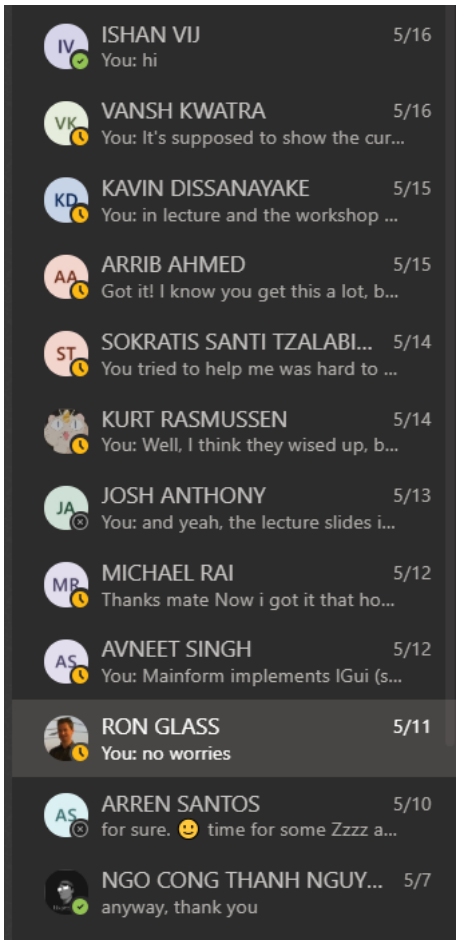


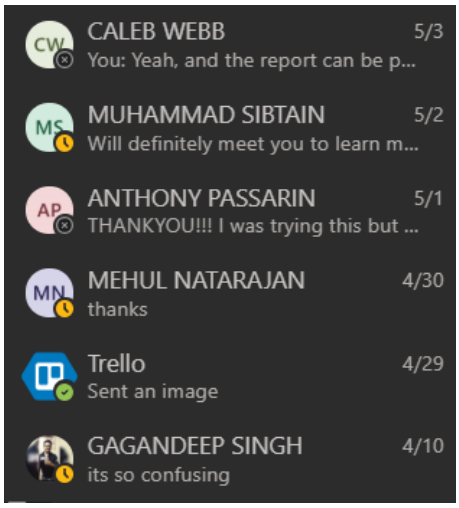
Figure 3: Example assistance provided on the student run Discord

Figure 4: Example of assistance provided on the student run Discord

Since we moved to Teams, I have continued to engage in discussions and provide assistance where I can.

This has resulted in many students starting private discussions to assist them with tasks. For example, the list of people I am involved in private messages with is indicative of the number of people I have been directly assisting where I can:





These discussions have been filled with comments acknowledging the helpfulness of the assistance provided. For example:

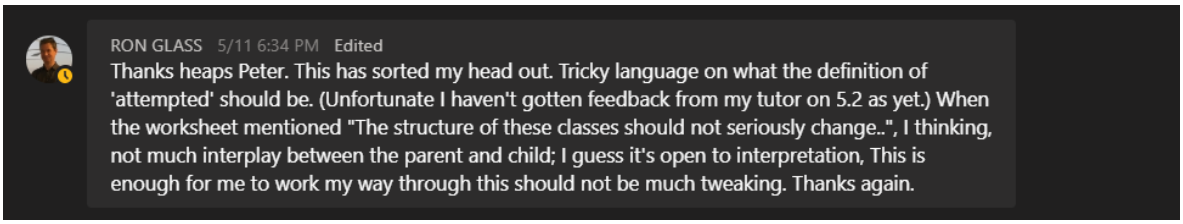


Figure 5: Example 1 of appreciation for assistance given

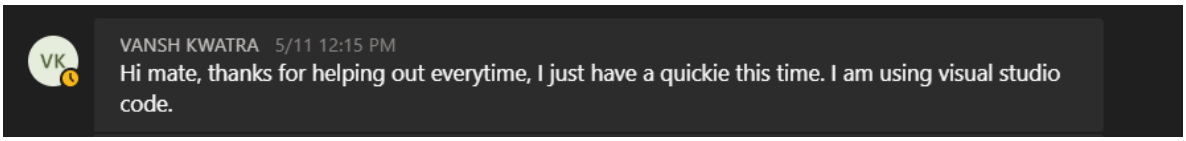


Figure 6: Example 2 of appreciation for assistance given

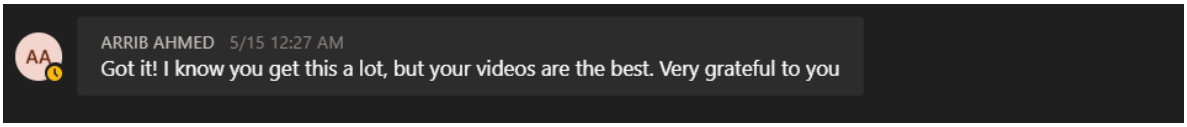


Figure 7: Example 3 of appreciation for assistance given

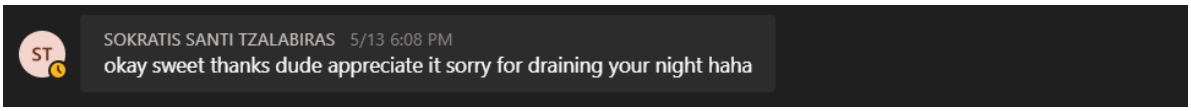


Figure 8: Example 4 of appreciation for assistance given

Figure 9: Example 5 of appreciation for assistance given

Figure 10: Example 6 of appreciation for assistance given

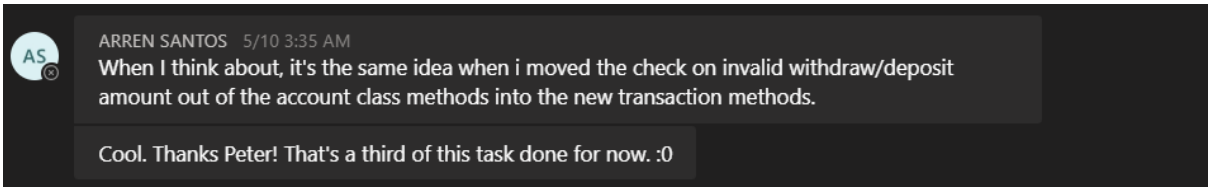


Figure 11: Example 7 of appreciation for assistance given

There are many more similar expressions of gratitude. Importantly however, in private messaging I never just supply an answer and always try to help other person understand the principles or concepts involved so they can solve it themselves.

For example:

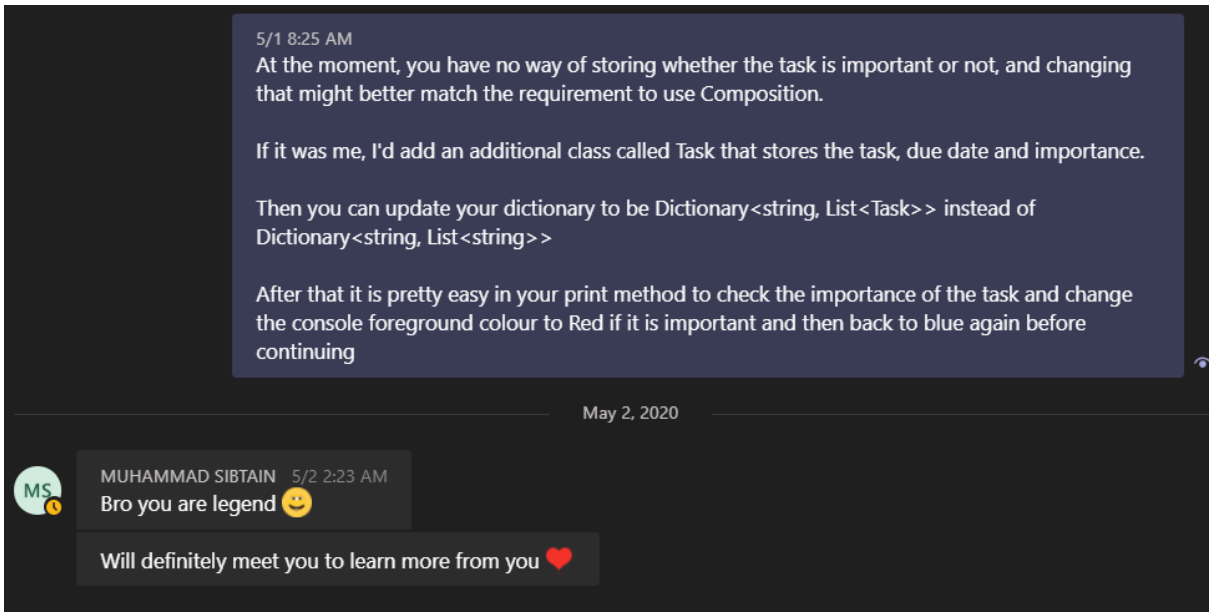


Figure 12: Example of explaining an error in a private chat and how someone might go about fixing their problem

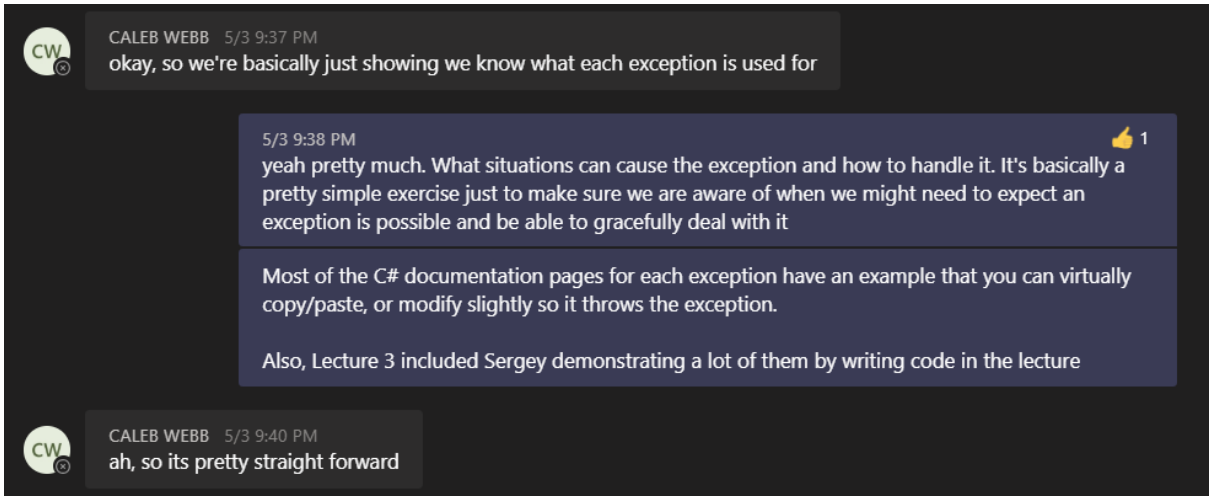


Figure 13: Example of responding in a private chat with general details and not just the answer

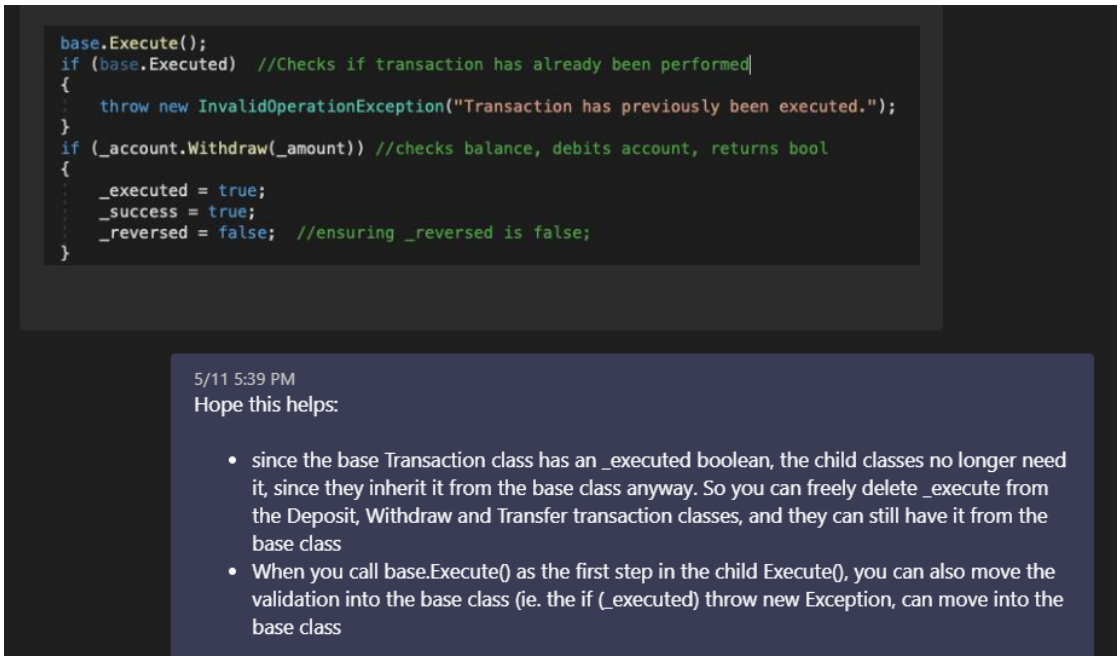


Figure 14: Example of explaining an approach in a private chat and not just providing the answer

Similarly, in the peer-to-peer and general channels on Teams, I've also tried to always be helpful, explaining concepts where I can.

For example:

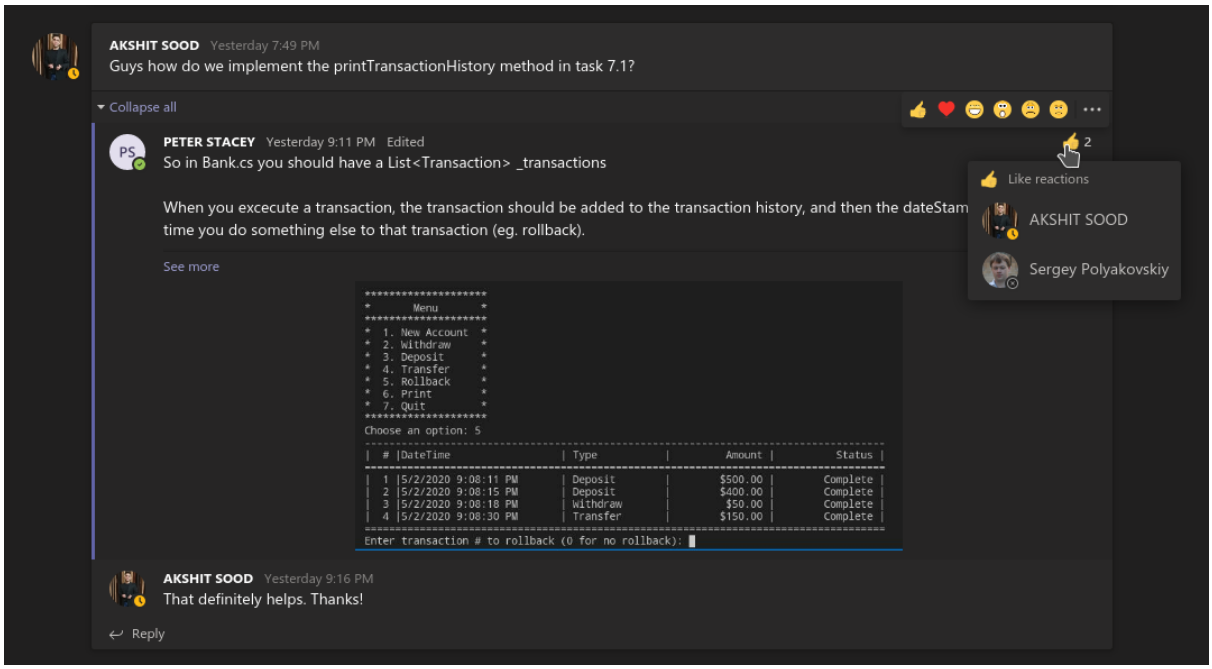


Figure 15: Example of assistance provided in the Peer-to-Peer channel

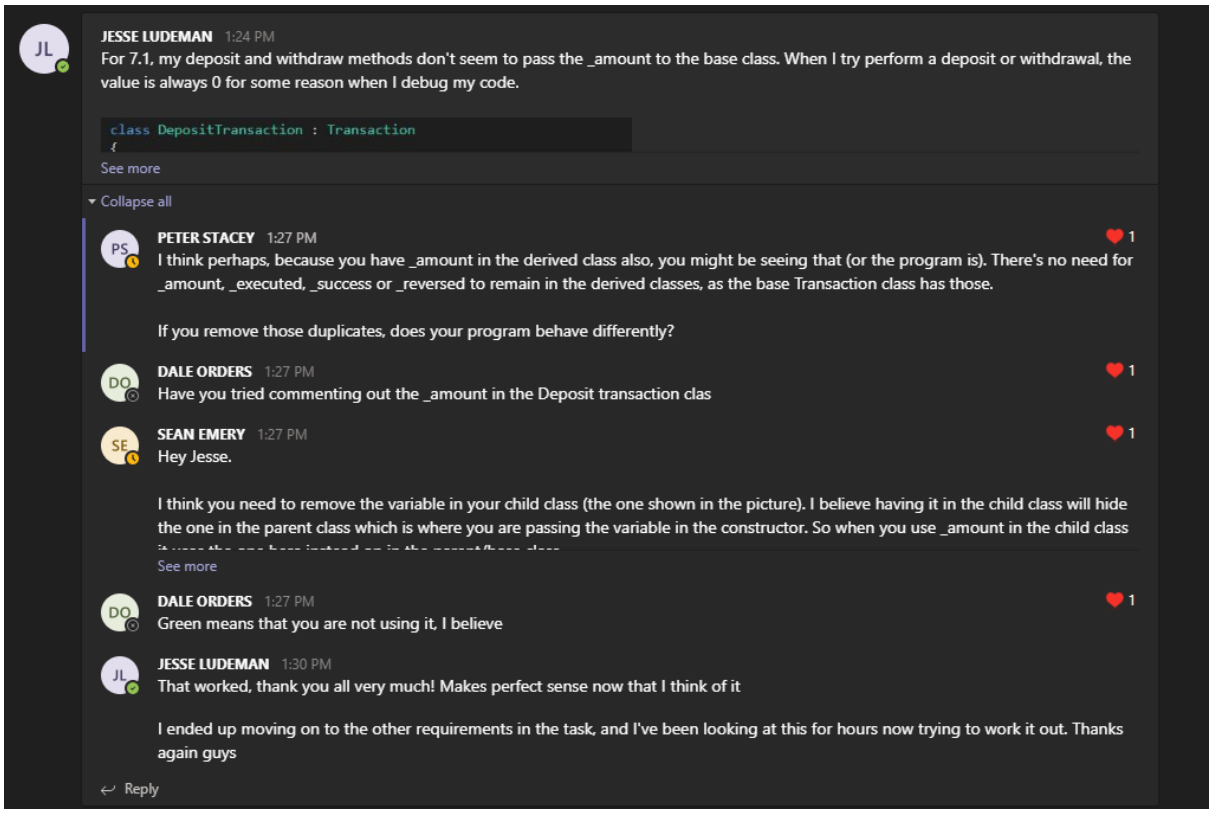


Figure 16: Example of assistance provided on Teams Peer-to-Peer channel

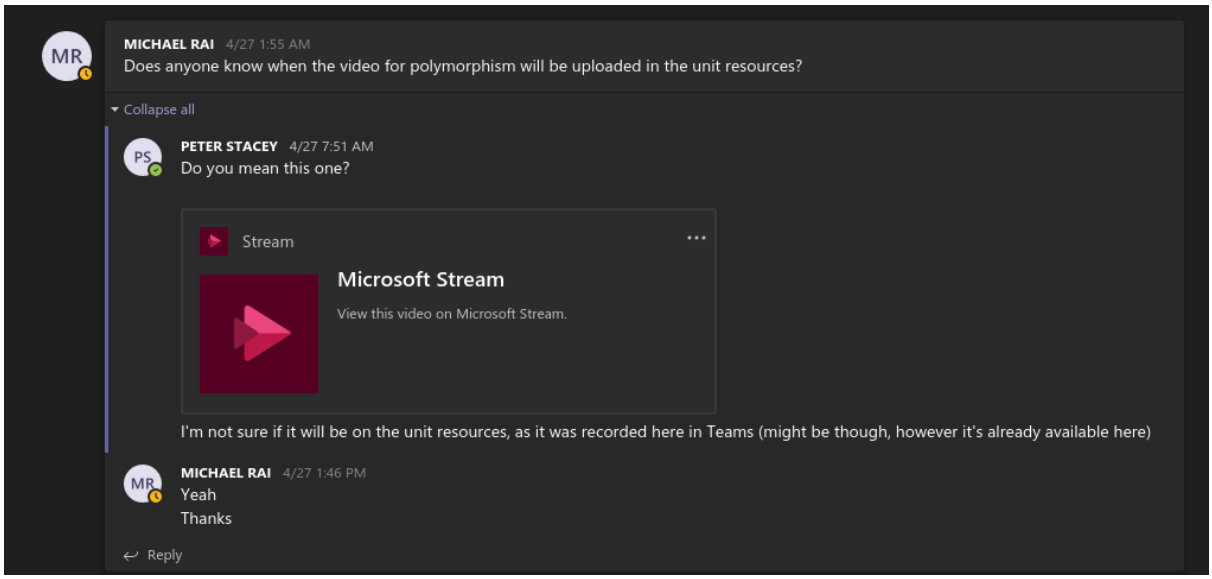


Figure 17: Example of assistance with links to material people are looking for

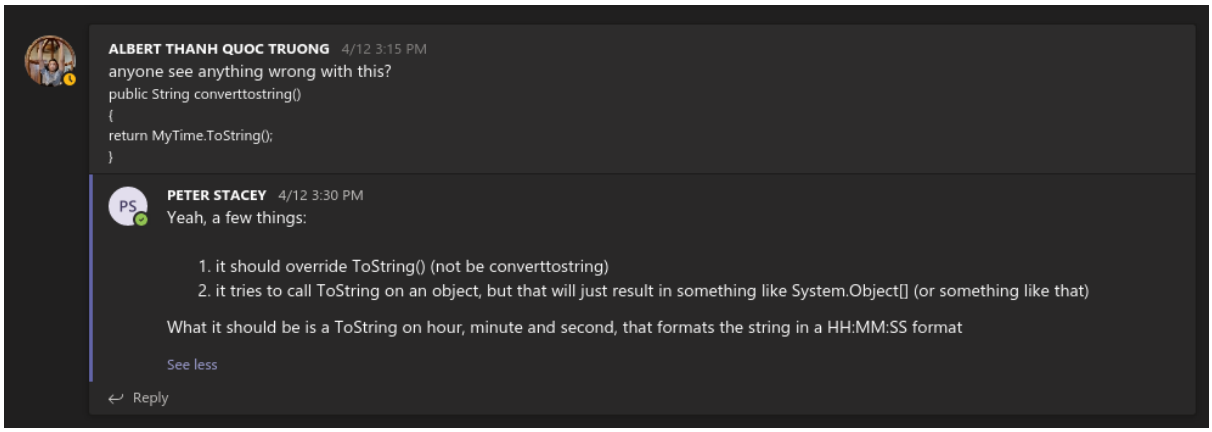


Figure 18: Example of assistance provided in the Peer-to-Peer channel

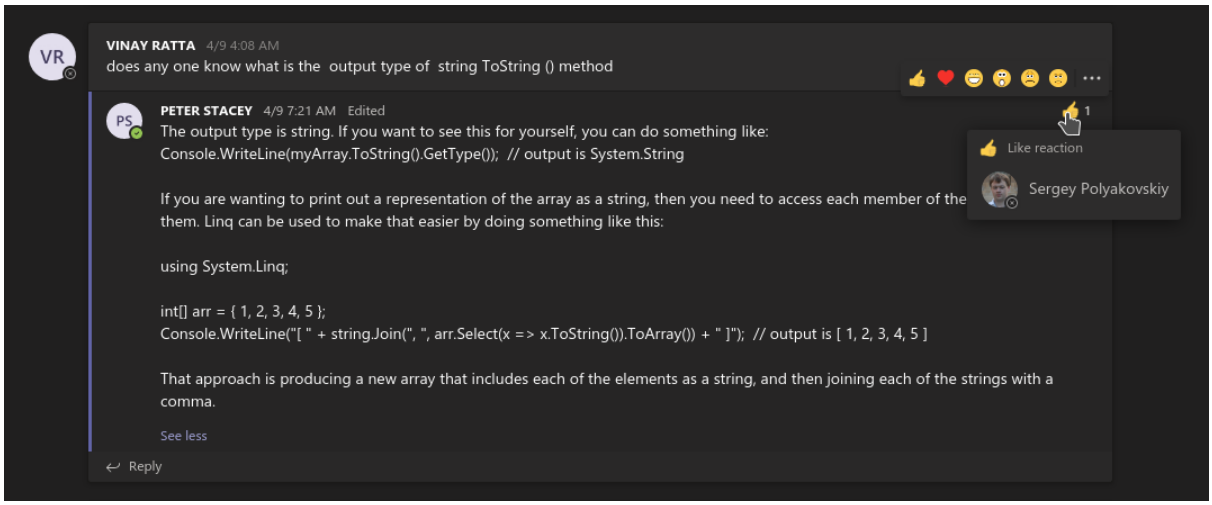
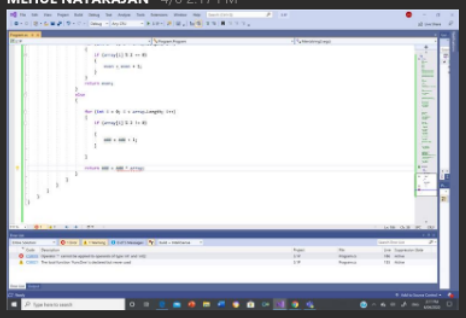


Figure 19: Example of explaining concepts involved in solving a problem, in the Peer-to-Peer channel

MEHUL NATARAJAN 4/6 2:17 PM



n

Collapse all

MEHUL NATARAJAN 4/6 2:18 PM
I'm getting an error for some reason

PETER STACEY 4/6 2:50 PM
Yeah because array is an array (ie. a collection of numbers) and you are trying to multiple it by an int.
Returning the odd product should return the product of all odd numbers multiplied together.
So above the for loop, just initialise an integer to 1 and then whenver you find an odd number, multiple that variable by the odd number and just return it at the end.

MEHUL NATARAJAN 4/6 3:02 PM
I made a variable called int number and set it to 1

but now when I run my program I get no output

PETER STACEY 4/6 3:03 PM
Are you returning the number from the function? Are you also multiplying it by any odd number in your for loop?

PETER STACEY 4/6 3:03 PM
Are you returning the number from the function? Are you also multiplying it by any odd number in your for loop?

MEHUL NATARAJAN 4/6 3:04 PM
This is what I wrote

```
return odd = odd * number;
```

PETER STACEY 4/6 3:07 PM Edited
Which isn't going to give you the right answer. In the for loop you already check if a number is odd, but then you are increasing the count of odd by 1. You should be multiplying "number" by the value from the array that is odd

For example:

- if you have an array [1, 2, 3, 4, 5]
  and you set int number = 1
  then in your for loop you identify each odd number, then:
  each time:
  number * array[i]
- In the end, that array above would end up returning 15 as the odd product
- then just return number at the end

  Really the best thing to do is work it through on paper so you understand the logic and what you want to achieve. Once you understand that fully, writing that into code is much easier

See less

MEHUL NATARAJAN 4/6 3:08 PM
Wait which part of the code are you referring to?

Here is the code below

```
int[] array = { 1, 2, 3, 4, 5, 6 };
        static int FuncOne(int[] array)
        {
          {
              int number = 1;
              int even = 1;
```

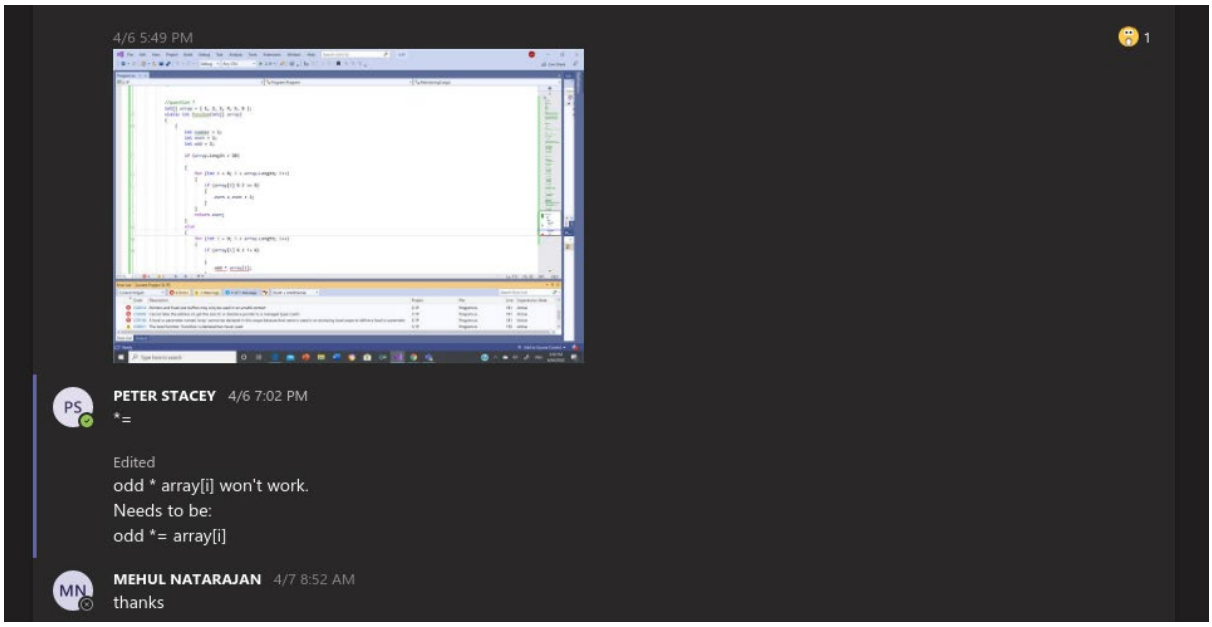


Figure 20: Example of staying with an issue to assist until the concept is understood

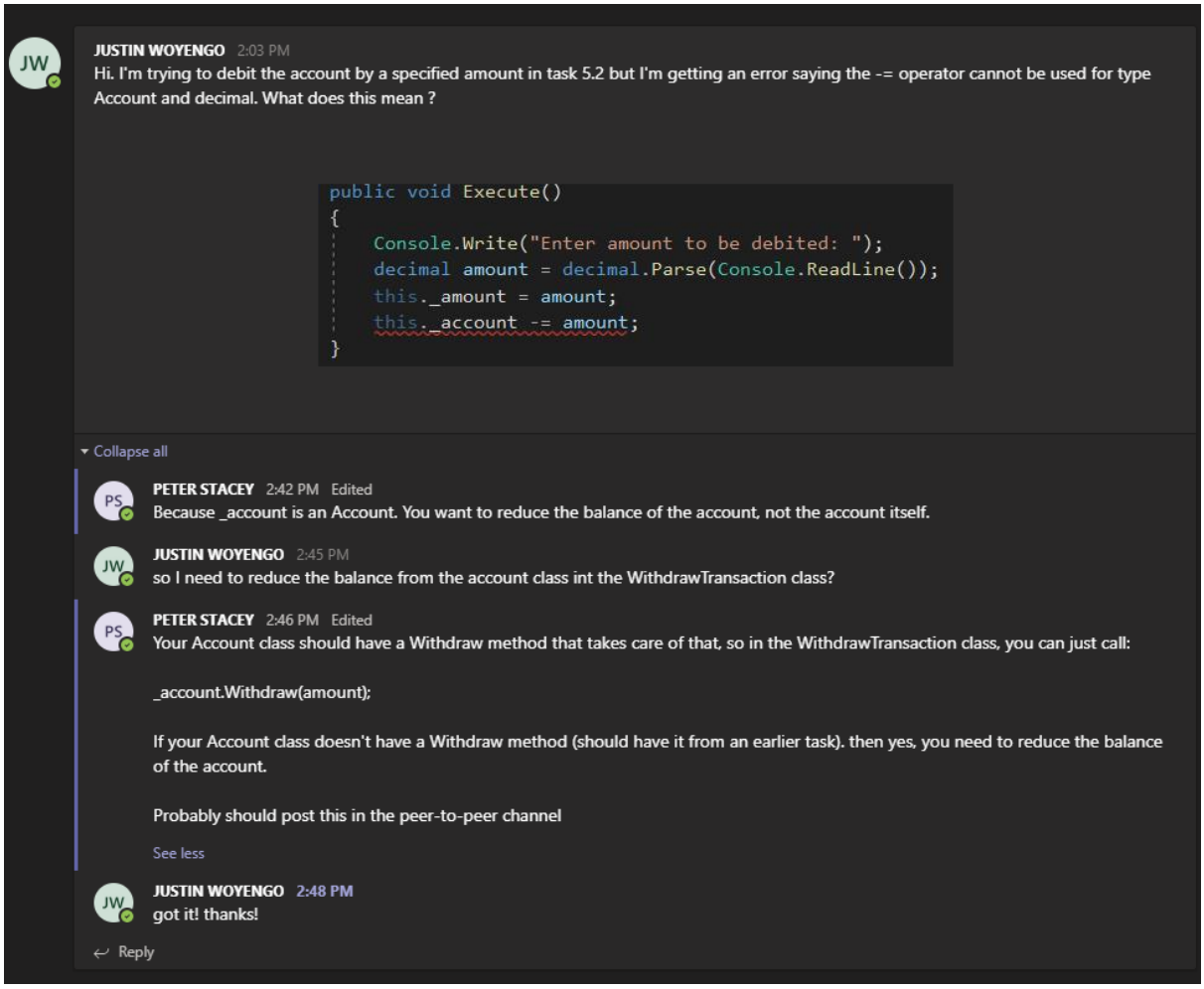


Figure 21: Example of assistance provided in the Teams Peer-to-Peer channel

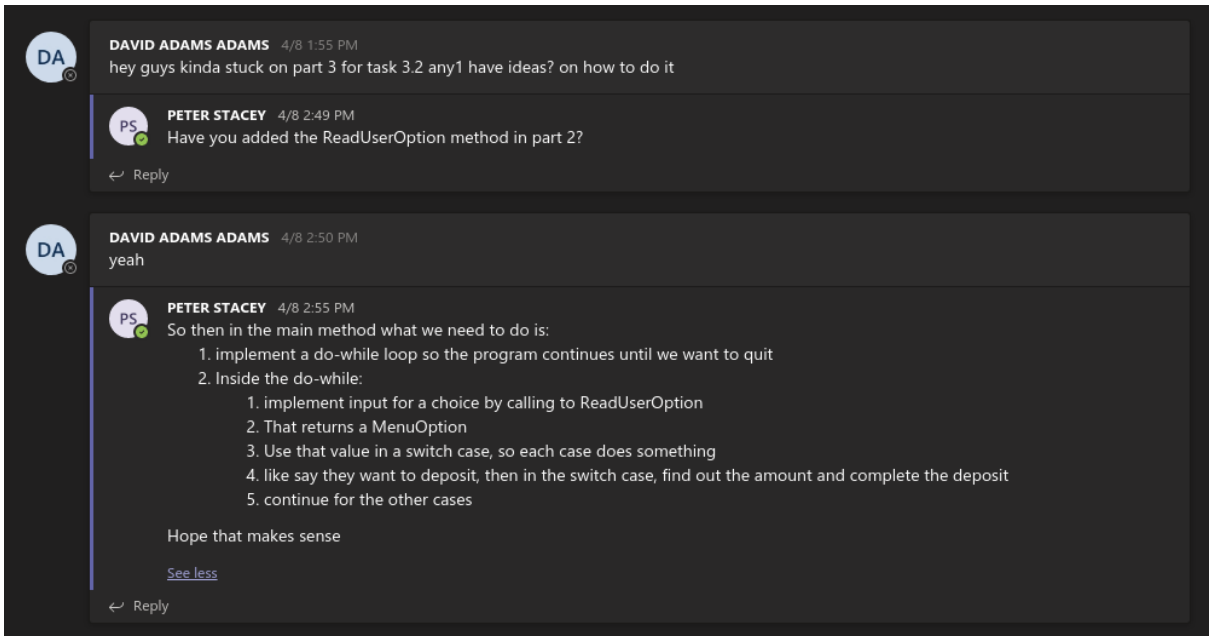


Figure 22: Example of assistance provided in the Teams Peer-to-Peer channel

For the whole Trimester, I have constantly and consistently engaged in assisting other students on the Forums, Discord and in Teams; and in engaging is discussion where my own view is changed by the valuable input of others.

In addition, throughout the semester, as I've created many graphs and images to assist me in explaining my solution in my videos, I've also shared those. Some examples include:

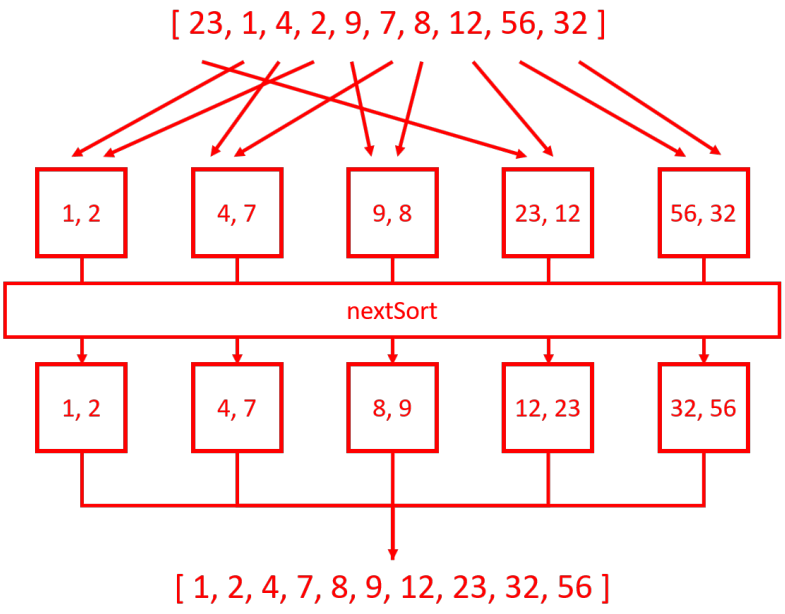


Figure 23: Example graphic that has been used to help explain the initial sorting process for the bucket sort task

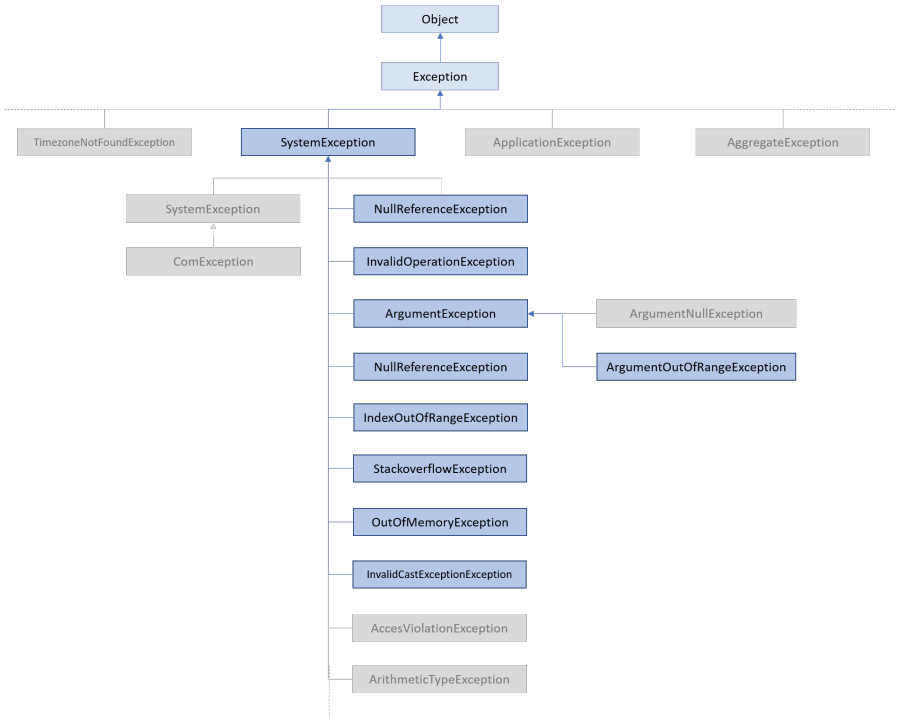


Figure 24: Example graphic that has been used to explain how the exceptions we covered in Task 4.1, relate to each other and to the broader exceptions provided by C#