Karin Metzgar

ASTE 546

HW 14

Part 1: Serial Code

A note about the HW14 PDF, in the screen shot you provided there is not a N-1 term in the final for loop which causes an error, it is correct in the code you provided but not in the screenshot. Just thought I’d point it out in case no one else did!

A screenshot of a computer program

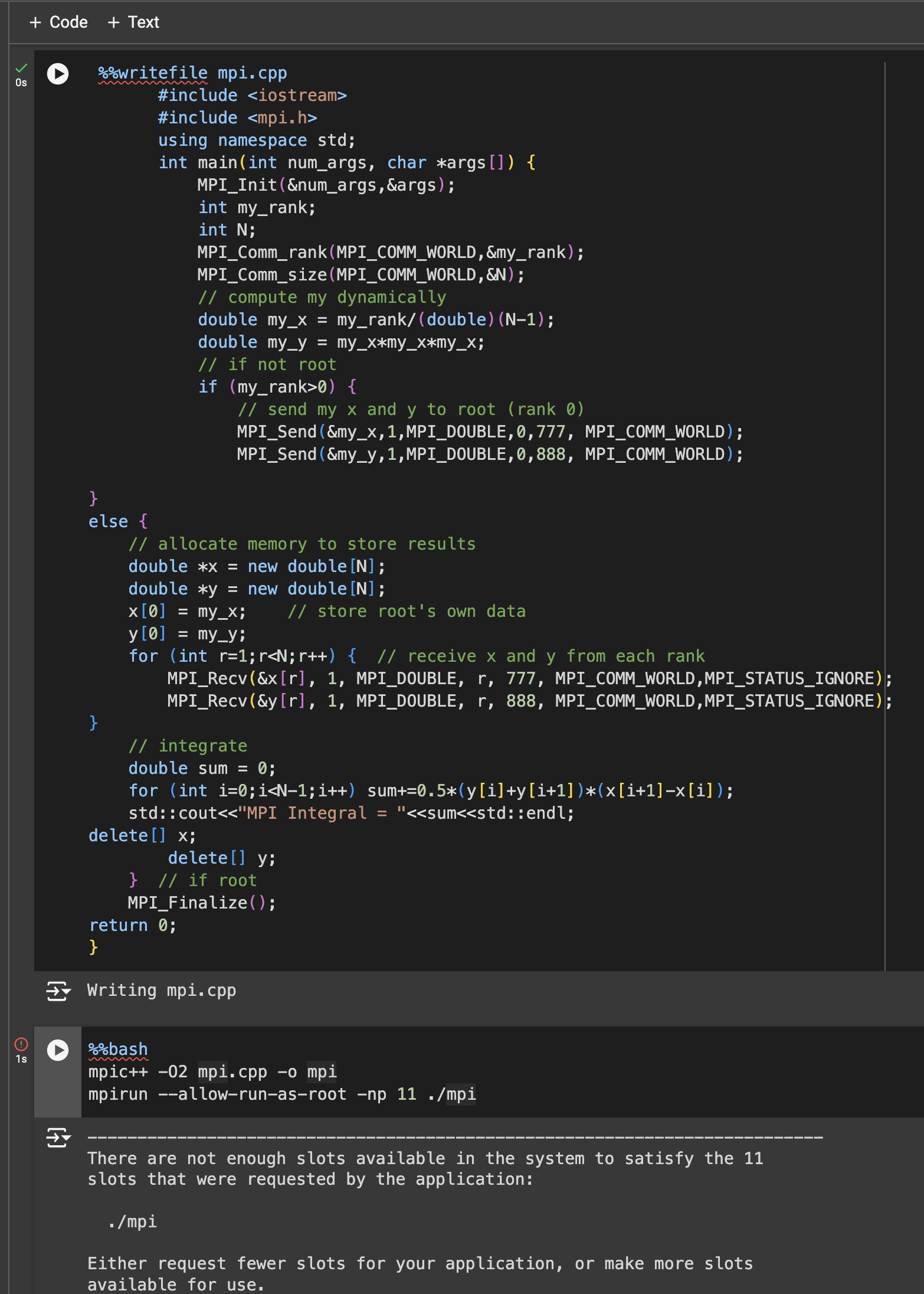
Description automatically generated

Part 2

A screenshot of a computer program

Description automatically generated

Part 3:



I got the “There are not enough slots” error if I used a number larger than 1, which resulted in sum = 0

I used the “oversubscribe” flag and was able to do more:  
A screenshot of a computer program

Description automatically generated

A screenshot of a computer

Description automatically generated

c) Both the send and receive functions go away

The loop that has all process (other than root) send their data to root is not necessary because the Gather function serves this purpose

The “else” code for the root was split up, the memory needs to be allocation before calling the gather function, then the gather function is called, then the rest of the block.

A screenshot of a computer program

Description automatically generated