

Description of the UDP Calculator

The UDP Calculator takes the user input for two numbers and an operator from the choice of adding, subtracting, dividing and multiplying, it then does a validation check on the users inputs for the two number values, afterwards it sends the data to the server and does the calculation on the server once the final answer has been deduced it is sent back over to the user and displayed. This meets the aim I have been given as it takes user input for the numbers and what calculation they would like to do and does the calculation on the server and sends it back to the user all through UDP Communication.

What libraries I used and how

I used the socket library so I could create the server, the client and the ports that are able to connect them together with the built-in functions that come with the socket library

My Evidence of it working

```
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Server is ready
Incoming numbers and operator: b'2' b'4' b'+'
Outgoing Message: 6
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Input first number
2
Input second number
4
Input what operator you would like to use(+, -, /, *)
+
The final value is: 6
Press any key to continue . . .
```

```
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Server is ready
Incoming numbers and operator: b'12' b'5' b'-'
Outgoing Message: 7
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Input first number
12
Input second number
5
Input what operator you would like to use(+, -, /, *)
-
The final value is: 7
Press any key to continue . . .
```

```
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Server is ready
Incoming numbers and operator: b'3' b'4' b'*'
Outgoing Message: 12
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Input first number
3
Input second number
4
Input what operator you would like to use(+, -, /, *)
*
The final value is: 12
Press any key to continue . . .
```

```
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Server is ready
Incoming numbers and operator: b'40' b'4' b'/'
Outgoing Message: 10.0
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Input first number
40
Input second number
4
Input what operator you would like to use(+, -, /, *)
/
The final value is: 10.0
Press any key to continue . . .
```

Networking Task Python

Week 10

Adam Board

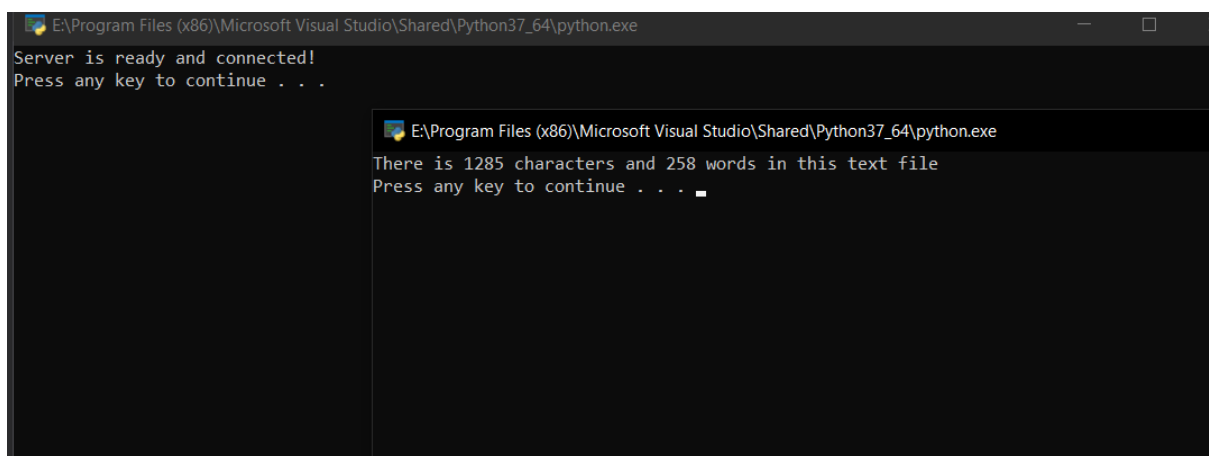
Description of the TCP Document Reader

The Document reader takes the Document that has been given to it and opens and reads it into a variable, it then sends it to the server so it can check how many characters it has – Including Whitespace – and how many words it has in it, with this data it then sends it back to the client and prints the number of words and characters on the clients display so they can see it. This fulfils the aim I was given as the client uploads the contents of a text file to the server and the server sends back the number of characters and words in the file

What libraries I have used and how

I used the socket library so I could create the server, the client and the ports that are able to connect them together with the built-in functions that allowed me to set up the TCP Connection

My evidence of it working



```
E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
Server is ready and connected!
Press any key to continue . . .

E:\Program Files (x86)\Microsoft Visual Studio\Shared\Python37_64\python.exe
There is 1285 characters and 258 words in this text file
Press any key to continue . . .
```