Scroll to page 6 for revised testing results from 2/24/2023

Pylint Test Results:

The first test actually gave me hope, as it was not actually that bad. I got a score of 8.78/10, with most errors being missing function docstrings, and some suggestions for better code. However, the problem that bothered me the most was that the program was seemingly unable to import numpy. I had struggled with this before, and I feared it would affect my program’s functionality.

Text

Description automatically generated

I as many of the mistakes as I could, and was surprised to find my score had actually decreased to 8.04. These were mostly the same mistakes.

Graphical user interface, text

Description automatically generated

After once again doing corrections, I was able to receive a much better score of 9.34/10. My only two problems now seemed to be a redefined variable, and the ability to import numpy.

Graphical user interface

Description automatically generated with medium confidence

My next attempt simply caused more problems, as, when I tried to fix the “phone\_num” issue, it seemed like I created two different variables. My score was now 8.79/10.

Graphical user interface

Description automatically generated with medium confidence

My final test received a score of 9.45/10, lowered only by the numpy import error. As I had struggled with this error before, and had found no solution, I decided to simply move on to the actual testing of the app.

Text

Description automatically generated

Test Cases:

(Note: The program was NOT able to run from the command prompt due to the “numpy” import error. However, it ran just fine from within PyCharm. That is because I imported numpy in PyCharm after repeatedly failing to import it from cmd).

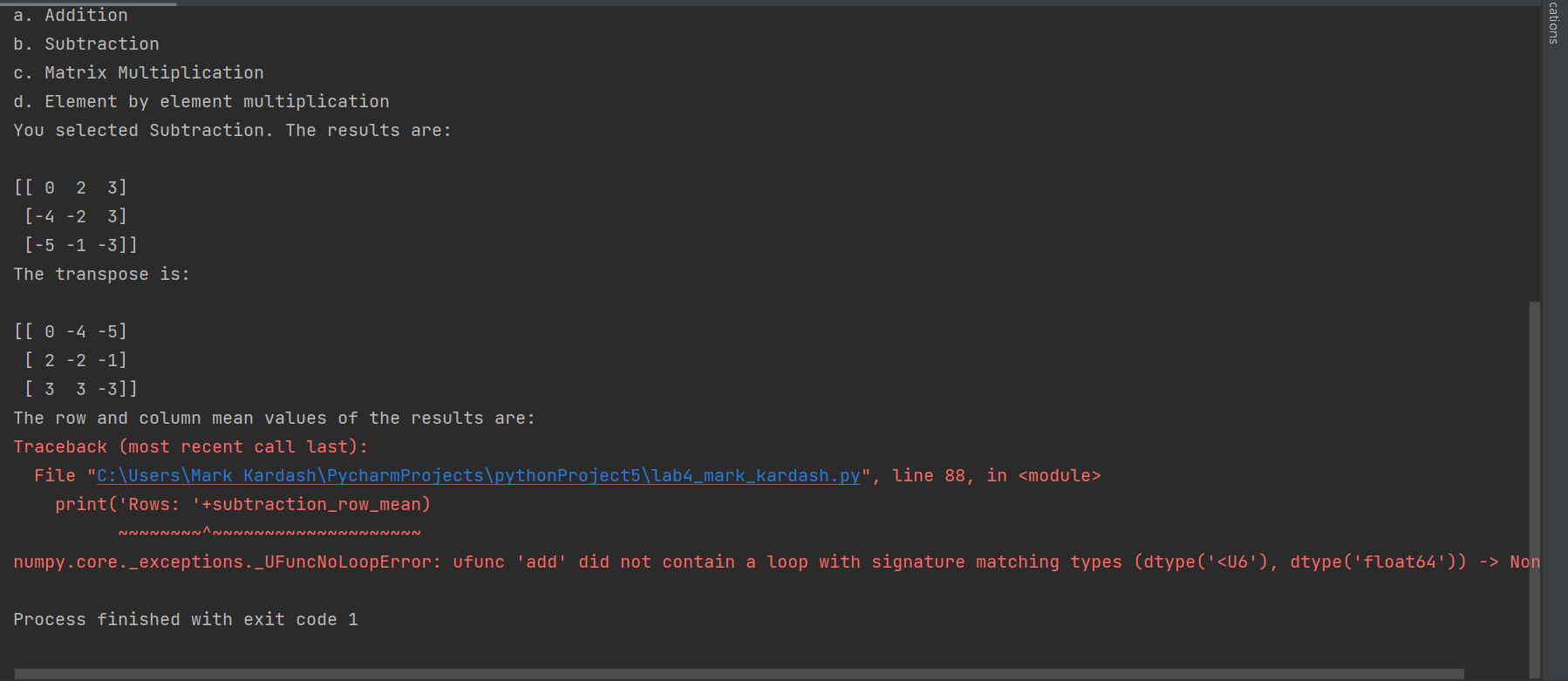
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Case: | Input (In Order): | Expected Output: | Actual Output: | Pass? |
| 1. | Y, 111-111-1111, 22222-1111, First Matrix: 1 2 3 4 5 6 7 8 9  Second Matrix: 7 3 8 1 3 0 2 9 6  (For operations: a) | Program lists first matrix, second matrix, displays option menu, adds matrices, displays results, transposes, and displays mean of rows/columns. | The program accepts all data, and displays the matrices, as well as the menu, until we arrive at the selection part. There, even though it performs the addition, we are faced with two errors, and no display of means. | No |
| 2. | Y, 444-444-4444, 22444-3333, First Matrix: 5 7 8 1 3 8 0 4 2, Second Matrix: 5 5 5 5 5 5 5 5 5 | Program lists first matrix, second matrix, displays option menu, subtracts matrices, displays results, transposes, and displays mean of rows/columns. | The program accepts all data, and displays the matrices, as well as the menu, until we arrive at the selection part. There, even though it performs the subtraction, we are faced with an error, and no display of means. | No |
| 3. | N | Program exits with “Thanks for playing python numpy” goodbye message. | Program exits with “Thanks for playing python numpy” goodbye message. | Yes |

Test Case 1 Screenshot:

Text

Description automatically generated

Test Case 2 Screenshot:



Test Case 3 Screenshot:

Text

Description automatically generated

Conclusions:

My program mostly failed due to a “NoLoop” error, as seen in the screenshots, which probably means I did not arrange some of my inner “if” loops correctly.

Password Cracker Results:

|  |  |  |
| --- | --- | --- |
| Password: | Hash output: | Did Crackstation work? |
| Password1:  rt78dg233 | 29287b26009649bface724f4720b0d136e725bde7394da6d752d5ed351440b7d  bbe1c8450536d4677fc5e04bba44af57be0b12e86a98057a2762f20e1506003d1fb4a2c4c0b9ff5c8eb317d92ff0c646a180ab430527bfd0be9b8a52d2f2b9e3  33b6554b7f3e751d6042b5ff858eb9c128ed6ed4737e84ecac6e78205762fae920da47275ebe4d8a8dc367fa7d6a241bed1a6f8292467e7569a0ab12b72206be  b2329fe0612c3232dfe51047d2e0505fcfcb689c2ebdccd69cab248f04dcb43aee817c3578208854f83273c6d8f4a262  e7f62b57db945f1fab548e614564ab9d93cc87a4fcf6c632f9e7fe82  08ad098f6c0be38b40d9b1eea586a6f94c61feb4c79a926acd632b8f92130caf | Yes |
| Password2:  tu@35^^^dgfgASQ | 1223bc5203fb3d7cfdc80db5465b4a27b5028f97821890a6ee3b4986d972e7e6  ef0a8d1254c587a3ee34a13e50da91606ebf24cc3afe94b38d4afffd6107284a72e7b3834b7231b373612d36324376cbba88e52fad1c2aa755d8e4c149ba94c9  c4903a3374b761294c6d0b45c03e36f1966dbfdf586b5becc8819ca832609ad2722e04147a1c37d08a76250e7e1cafdb049f335e2e564f6e97354c52ee7ec0f2  3754a75f1968fb2daf4966cd935d04ecfb91802ef248b51e28d744eeae6457027ec36e9e9eefc2147006c6ce4f6f8209  b282c786b85edcd282d347ca814f137e7bbf7817552a00db7788e5fc  0880143f66c930259f4ac33487de0edf96c4be3ab63ba5d78c532f30976c3d44 | Yes |
| Password3:  gttty#%^&ffGGH | e3b0c44298fc1c149afbf4c8996fb92427ae41e4649b934ca495991b7852b855  cf83e1357eefb8bdf1542850d66d8007d620e4050b5715dc83f4a921d36ce9ce47d0d13c5d85f2b0ff8318d2877eec2f63b931bd47417a81a538327af927da3e  786a02f742015903c6c6fd852552d272912f4740e15847618a86e217f71f5419d25e1031afee585313896444934eb04b903a685b1448b755d56f701afe9be2ce  0c63a75b845e4f7d01107d852e4c2485c51a50aaaa94fc61995e71bbee983a2ac3713831264adb47fb6bd1e058d5f004  d14a028c2a3a2bc9476102bb288234c415a2b01f828ea62ac5b3e42f  69217a3079908094e11121d042354a7c1f55b6482ca1a51e1b250dfd1ed0eef9 | Partially (Two cracked) |
| Password4:  [ ] (Blank) | 56eab0086a3a731328f7d42aad84890c76d092268c5ae198fe3666f113b319bf  56425b536b38f363a3404d5ed0ca464f246e9e98e474770850607e622402fd3d1229bd13baba4b7f6663d299fafe4315d3ec8ed7f482b8a6a2dda747b692cae8  01296accb2563e2ad54705cbeb9cc84223667e83164646e49da0de00da08dec43cc69b68b82f81a2db71a4804595b35859e6e07f8fcf630b3516fadc92b00bb7  69488ac06fc043eb6c88706f6782c99ece1f87b338b5c5002051ed4a5719105282139a3d5e612cc47c6f867270b54b01  e32b2f0c3c64065ae45397ab9f380e4383fda803ec028f8cb9188d72  e64daf444244d83159c440226a34a457b831bcb18bcb50eb1801341f1b0ef2ef | Yes |
| Password5:  FGHHJJ44%%%dffg | 7378855fd85e483052b44b7a0574367b3d18b3b400426e7f05cff7c769f2b3df  63d950fa1283a5fc5c69253149f9fe35545ab888cafdd8686ed59b418cf5d4bc9fa628aa05af987af65ddb29342e5e688d9b76f4de50e631022406666e408509  c8b511c3f1a3b75da25687dd8c0c8e915877ef6f82a604cb009d3ba85ce7c568a81154b67b64cc14e88a1e516a647ee34bf0cd12891db06b2cde67e626c4e700  0b920ac09a2b00b0eb38fb9721e19888064b33bdf49263e4de03bb1bd0bba4b8154502266cc92c2fb33d602bdb90cd14  a68884dc4cd8e3d33803fa336c0cf3eb114ca58d1c37f9509ed5231a  63471a45bc615048717e9fa96ad389962da5143483fc24a3fe6a5a3a24f8dece | Yes |
| Password6:  tyyTU&&\*\*6567hhhHH | cc5e281135565a68f9017a93feb3d4ae009c649fafd175b4ef9331f312fe2e1f  1bff2f02c0c7bfb21febb6332a7b1c7f9985aea6f42a222a1f1da7862c1fc3b5cff19655b71146648f4b1e681ed803563bb36731f13f207962e7c6b3d2fae3ef  9212a71665bafdc8806003786898e71ab25f9282739eab7e0deca51c93ac495a380a4da94160fbe1a4b672b79d9f085633a6bb3150b89e7ec8f3cd1edd7039ec  c85ee664d21406111b000241c955f57f91b70e5c75c162383cb0bca632c91c057cf4b53833ce3994ae8780a5658d4784  704006f30bea0472bb28da7eb7710200726ed878bb49cbadc227209d  a137892bfd4381e1f697aa54159432f27125b4957e5c88005342a61bef6b2dae | Yes |
| Password7:  hD788H4$$6@@@ | 2c810a8571d0f6a7fa726e699c03dc94579e52ba72ebe0f22e8bcc5ae40bd538  71354267736b5763389b233c33c2c0e487359a671ed585960ec0f2a2148543b3d57f332169ee6c544e6301134b9f252a731f25364becdd60190a0bb5ae2053bf  67133fa363dc6eeeb6cedcf142f635c39c3495579bc38d384631417d30ef74fff6e7388b747e0d9a8a7dd9326adc5f681bf78971931f95c88d88c52cd497444b  e39fe8d96266edf5559e1e436d3112951a9fec822f639bd97919109a9f7ce3af98a294c93d8922c0de4758fda7c18f1c  158c5435ff0d6019734478d80bde6e97362c8208293690214f5e7ed0  56ab294d0c0e3271a3747a5dd82bf6f3b6b69b7a0d4ec3d839fcbe5819817b70 | Yes |
| Password8:  E73#0t5R(7 | 680e99cb66ae6dcdf358b1a340ae6e5a99a2f19ec093a95b8867e69bd637cedb  9d9436c3f7f7d15888633465ada3c3d0e3fdcca908a26d745c6e2bb8ca49996d9efa8bcfc16104181bc5bb64acb46c03a57511f5036a0d7b746dfe6e4e8973e8  1e2b9891a7c9b395b33f1701b0e37714098ccc988ef95c09f6f680ca2eed79a4d9927e7b902c0e7166fb2badcef735cd9e654793fe479e1b0d7e682b078d1ee4  8904cbd54d9831e31955a194325065469907ba64c52c2996aece9d574d35cae1ccf8b4455fa42c05d473079321cebb49  304d0ced6f4e403eea04f3b44dcce8c8e04c6d09ee510e5bb7747e0f  18f252b1b5db6b3e11a4f046ee68c049bca018577b2373c661400ce2a6a3ce63 | Yes |
| Password9:  TI$%%7yio | dc978fea6fff7bf2582d0818df3477549d1221452996291d837e872749a06491  08847eee90fda9361c4bddf0fde0ebe259b63e8310bf1e99cc3838fd3329e08b823aff32854b146a8a6ddd3c57f0afeb15e97d97e6ea9d4c65e5c25b66abe642  5bbb37a91e3d4edc5273a7d80d06bdbdcae86ae6330c7184727ef91670d7c708950d52283b7bb0a95f07ee6d338b5d96713feb1a7ad6c8bf5c2ca1087bf6a3fd  c9f606512f53dfd0b3c7bf6018ff98b2c3e853c7ff749ff3c9a0559f9dbbc6523cda042482654d14a5d912ff8f946258  6d9518cf19658919e2fef5d0c21b5615b2bc36eb4ad486d383a14d93  178c8ff844cfcf4818d1ac2ca18d8fb17f6fb0d43d1204f3c851349c7c75558f | Yes |
| Password10:  J$yj7YUUIU | f6d1f9263e3d192b5be9498340aa50e86ee5ddc85bac94d2cda4c5633706f709  23087f9212392ef40c1c750500f0ab02e38aa96f64dfd32e39e1b65500efdea4e939f60ff2ff537079e0f0355ed8466ee116dce0771cd349d53d72ddf1a3550b  8e7882db9b567305f5ecdc3beb1c85a635369fe42235a866051c1b1b6d28fa3e584a120616fbf0c38ea55760efb0a0283ea8306247c547148b7a84340be6bd85  8fe1d086f1499c3b42d4ea0d3b4d05ed45fccd25919f7bf91e229a707f7a4af7079efa56d0a8cccd5007bc1347ff9502  9ec9c3b25d01df5bc42803343dc3d196a3960e6d24fe4cdefc0cd575  f907d2d85cb0d668090677406ec25f7c38e45eb1eb4775b5aaf8c6a57f5ec6b3 | Yes |

Revised results (2/24/2023):

Pylint Testing:

My first score was 4.92/10, which, admittedly, was much lower than I expected. It appears that I had some trailing newlines, unused and undefined variables, as well as too many arguments for some functions. So I set out to make this right.

Graphical user interface, text

Description automatically generated

Upon correcting all issues, I received a perfect pylint score.

Text

Description automatically generated with medium confidence

Test Cases:

I re-did only the test cases for the main program, as the password cracker is a separate application that had worked perfectly the other time. For those results, see page 4.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Case: | Input (In Order): | Expected Output: | Actual Output: | Pass? |
| 1. | Y, 111-111-1111, 22222-1111, First Matrix: 1 2 3 4 5 6 7 8 9  Second Matrix: 7 3 8 1 3 0 2 9 6  (For operations: a), N for final exit. | Program lists first matrix, second matrix, displays option menu, adds matrices, displays results, transposes, and displays mean of rows/columns. The program also exits when N is put into the main prompt. | Program lists first matrix, second matrix, displays option menu, adds matrices, displays results, transposes, and displays mean of rows/columns.  The program also exits when N is put into the main prompt. | Yes |
| 2. | Y, 444-444-4444, 22444-3333, First Matrix: 5 7 8 1 3 8 0 4 2, Second Matrix: 5 5 5 5 5 5 5 5 5, “b” for operations, “e” to exit operations, “N” to exit entire program. | Program lists first matrix, second matrix, displays option menu, subtracts matrices, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Program lists first matrix, second matrix, displays option menu, subtracts matrices, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Yes |
| 3. | All input same as above, except “c” choice for operations. | Program lists first matrix, second matrix, displays option menu, multiplies matrices, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Program lists first matrix, second matrix, displays option menu, multiplies matrices, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Yes |
| 4. | Same entries, except “d” for operations. | Program lists first matrix, second matrix, displays option menu, multiplies matrix elements, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Program lists first matrix, second matrix, displays option menu, multiplies matrix elements, displays results, transposes, and displays mean of rows/columns.  The program also exits the operations menu when is put into the operations prompt, and the entire program exits when N is put into the main prompt. | Yes |
| 5. | N | Program exits with “Thanks for playing python numpy” goodbye message. | Program exits with “Thanks for playing python numpy” goodbye message. | Yes |

Test Case 1 Screenshot:

Text

Description automatically generated

Test Case 2 Screenshot:

Text

Description automatically generated

Test Case 3 Screenshots:

Text

Description automatically generated

Text

Description automatically generated

Test Case 4 Screenshots:

Text

Description automatically generated

Text

Description automatically generated

Test Case 5 Screenshot:

Text

Description automatically generated

Conclusions:

Absolutely excellent results this time. Had some struggles, but overall, things went pretty well. I will also be attaching the password app to the submission again, though I didn’t make any corrections to it, as it didn’t need any.