

CS 5720 Neural Network Deep Learning

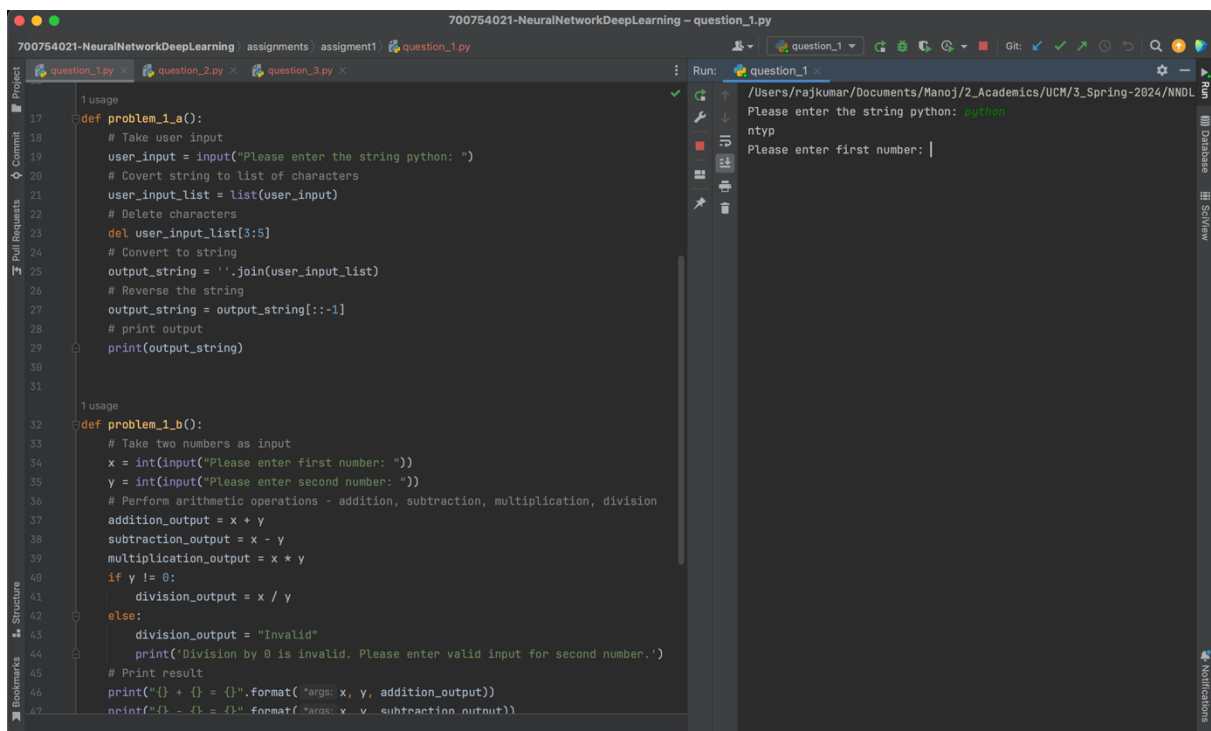
ICP-1

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GitHub Repository:

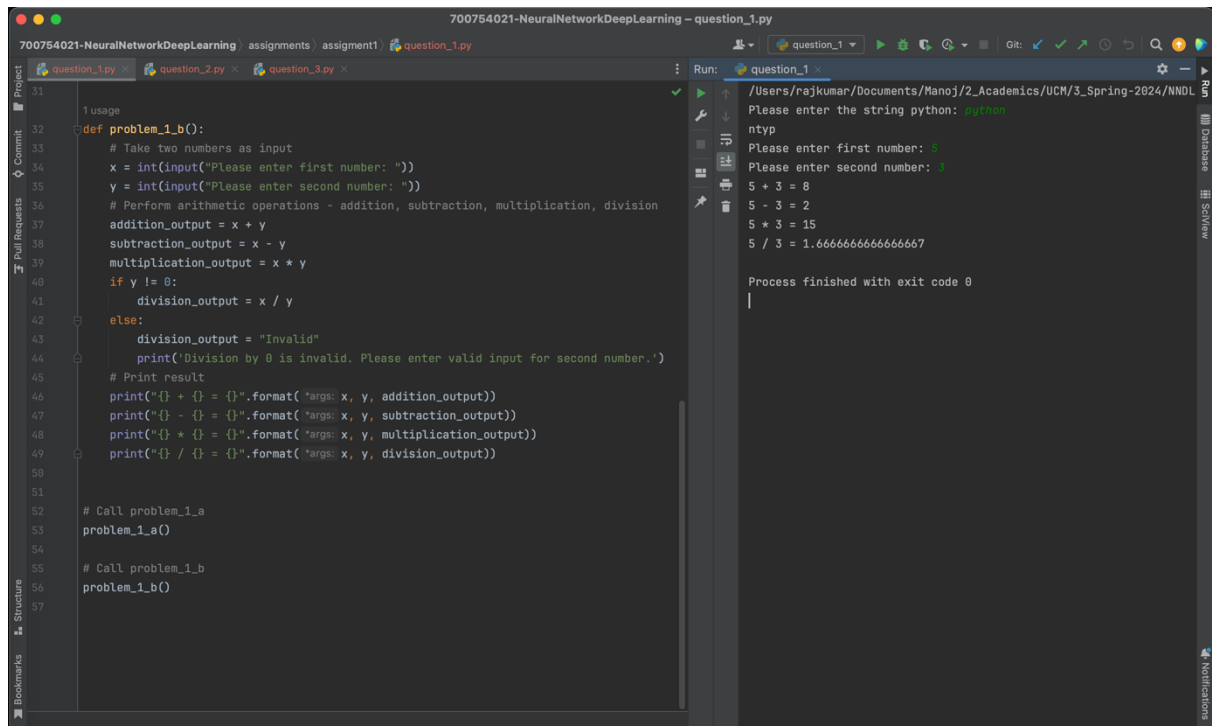
<https://github.com/mxb40210/700754021-NeuralNetworkDeepLearning>

1. Question 1



```
700754021-NeuralNetworkDeepLearning - question_1.py
700754021-NeuralNetworkDeepLearning assignments assignment1 question_1.py
question_1.py question_2.py question_3.py
Run: question_1
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Spring-2024/NNDL
Please enter the string python: python
ntyp
Please enter first number: |

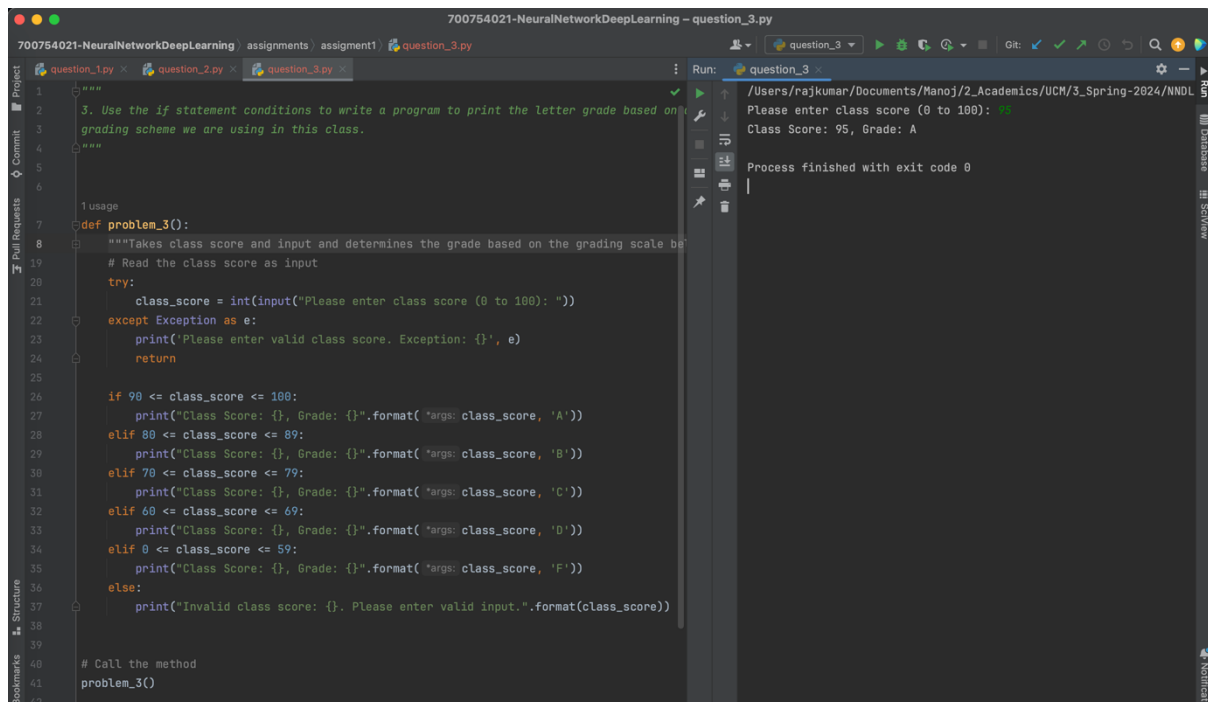
1 usage
17 def problem_1.a():
18     # Take user input
19     user_input = input("Please enter the string python: ")
20     # Convert string to list of characters
21     user_input_list = list(user_input)
22     # Delete characters
23     del user_input_list[3:5]
24     # Convert to string
25     output_string = ''.join(user_input_list)
26     # Reverse the string
27     output_string = output_string[::-1]
28     # print output
29     print(output_string)
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31
32 1 usage
33 def problem_1.b():
34     # Take two numbers as input
35     x = int(input("Please enter first number: "))
36     y = int(input("Please enter second number: "))
37     # Perform arithmetic operations - addition, subtraction, multiplication, division
38     addition_output = x + y
39     subtraction_output = x - y
40     multiplication_output = x * y
41     if y != 0:
42         division_output = x / y
43     else:
44         division_output = "Invalid"
45         print('Division by 0 is invalid. Please enter valid input for second number.')
46     # Print result
47     print("{} + {} = {}".format("args: x, y, addition_output"))
48     print("{} - {} = {}".format("args: x, y, subtraction_output"))
```



```
700754021-NeuralNetworkDeepLearning - question_1.py
700754021-NeuralNetworkDeepLearning assignments assignment1 question_1.py
question_1.py question_2.py question_3.py
1 usage
2 def problem_1_b():
3     # Take two numbers as input
4     x = int(input("Please enter first number: "))
5     y = int(input("Please enter second number: "))
6     # Perform arithmetic operations - addition, subtraction, multiplication, division
7     addition_output = x + y
8     subtraction_output = x - y
9     multiplication_output = x * y
10    if y != 0:
11        division_output = x / y
12    else:
13        division_output = "Invalid"
14    print('Division by 0 is invalid. Please enter valid input for second number.')
15    # Print result
16    print("{} + {} = {}".format("args: x, y, addition_output"))
17    print("{} - {} = {}".format("args: x, y, subtraction_output"))
18    print("{} * {} = {}".format("args: x, y, multiplication_output"))
19    print("{} / {} = {}".format("args: x, y, division_output"))
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21    # Call problem_1_a
22    problem_1_a()
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24    # Call problem_1_b
25    problem_1_b()
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```

3. Question 3



The screenshot shows a code editor window titled "700754021-NeuralNetworkDeepLearning - question_3.py". The editor contains a Python script for a function named `problem_3()`. The script prompts the user to enter a class score (0 to 100) and prints the corresponding letter grade based on a grading scale. The grading scale is as follows:

Class Score Range	Grade
90 <= class_score <= 100	A
80 <= class_score <= 89	B
70 <= class_score <= 79	C
60 <= class_score <= 69	D
0 <= class_score <= 59	F

The script also includes error handling for non-integer inputs. The execution output shows the user entering "95", resulting in a grade of "A". The process finished with exit code 0.

```
1 """
2 3. Use the if statement conditions to write a program to print the letter grade based on the
3 grading scheme we are using in this class.
4 """
5
6
7 def problem_3():
8     """Takes class score and input and determines the grade based on the grading scale based on the input
9     # Read the class score as input
10
11     try:
12         class_score = int(input("Please enter class score (0 to 100): "))
13     except Exception as e:
14         print('Please enter valid class score. Exception: {}'.format(e))
15         return
16
17     if 90 <= class_score <= 100:
18         print("Class Score: {}, Grade: {}".format(class_score, 'A'))
19     elif 80 <= class_score <= 89:
20         print("Class Score: {}, Grade: {}".format(class_score, 'B'))
21     elif 70 <= class_score <= 79:
22         print("Class Score: {}, Grade: {}".format(class_score, 'C'))
23     elif 60 <= class_score <= 69:
24         print("Class Score: {}, Grade: {}".format(class_score, 'D'))
25     elif 0 <= class_score <= 59:
26         print("Class Score: {}, Grade: {}".format(class_score, 'F'))
27     else:
28         print("Invalid class score: {}. Please enter valid input.".format(class_score))
29
30 # Call the method
31 problem_3()
```

Run: question_3 x
/Users/rajkumar/Documents/Manoj/2_Academics/UCM/3_Spring-2024/NNDL
Please enter class score (0 to 100): 95
Class Score: 95, Grade: A
Process finished with exit code 0