Spring 2024: CS5720
Neural Networks & Deep Learning - ICP-1

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GitHub link: https://github.com/kvamsi7/mscs/blob/mscs_nn/CS5720-Neural%20Network%20and%20Deep%20Learning/Assignments/ICP-1/ICP-1.ipynb

1. Write a python program for the following:

1.1 – Input the string "Python" as a list of characters from console, delete at least 2 characters, reverse the resultant string and print it.

■ **Code snippet:**

```
In [1]: input_ = list(input("Enter the String: "))
        del input_[-3:-1] # delete the second last and third characters
        input_ = "".join(input_) # join all the characters
        input_ = input_[::-1] # reverse the string without using functions
        print(input_)

        Enter the String: python
        ntyp
```

1.2 – Take two numbers from user and perform at least 4 arithmetic operations on them.

■ **Code snippet:**

```
In [41]: num1 = int(input("Enter integer input 1: "))
         num2 = int(input("Enter integer input 2: "))

         print("sum:",num1 + num2) #Addition

         print("subtraction: ",num2 - num1) #Subtraction

         print("modular division: ",num2 % num1) # modular division

         print("power: ",num1 ** num2) # power operation

         Enter integer input 1: 2
         Enter integer input 2: 5
         sum: 7
         subtraction:  3
         modular division:  1
         power:  32
```

2. Write a program that accepts a sentence and replace each occurrence of 'python' with 'pythons'.

■ **Code snippet:**

```
In [46]: input_ = input("Enter the Sentence: ")

         input_ = input_.replace("python","pythons") # replacing all the strings python with string pythons

         print(input_)

         Enter the Sentence: i love playing with python
         i love playing with pythons
```

3. Use the if statement conditions to write a program to print the letter grade based on an input class score. Use the grading scheme we are using in this class

■ **Code snippet:**

```
In [4]: score = float(input("Enter the class score: "))
        if score >= 0 and score <= 100:
            if score >= 90:
                print("Your grade is 'A'.") # if score is greater than or equal to 90
            elif score >= 80:
                print("Your grade is 'B'.") # if score is greater than or equal to 80
            elif score >= 70:
                print("Your grade is 'C'.") # if score is greater than or equal to 70
            elif score >= 60:
                print("Your grade is 'D'.") # if score is greater than or equal to 60
            else:
                print("Your grade is 'F'.") # if score is less than 60
        else:
            print("Please Enter the correct score which is of range 0 to 100")

        Enter the class score: 99
        Your grade is 'A'.
```