**In class Programming Assignment - 1**

**Github Link:** [**https://github.com/AkhilaBollepalli/ICP1**](https://github.com/AkhilaBollepalli/ICP1)

**Problem 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.

**Input:** String

**Output:** String

**Solution:**

1. The user string is taken, stored in the “initial\_string” variable and converted into a list of characters using the list() method.

2. The last two characters were deleted using the string-slicing operator and stored in the "final\_string" variable.

3. Then the string is printed in reverse order.

**Code:**

A close-up of a computer code

Description automatically generated

**Output:**

A white background with black and white clouds

Description automatically generated with medium confidence

**Problem 1.2:** To input two numbers from the user and perform at least four arithmetic operations on them.

**Input:** Two integers

**Output:** A series of outputs corresponding to its arithmetic operation

**Solution:**

1. Two integers are taken from the user.

2. Five arithmetic operations are performed on the numbers taken from the user.

3. The output for the operations is printed on the console.

4. str(string) method converts any data type into string data type which is further concatenated with other strings in the print function.

**Code:**

A screenshot of a computer code

Description automatically generated

**Output:**

A white background with black text

Description automatically generated

**Problem 2:** Write a program that accepts a sentence and replace each occurrence of ‘python’ with ‘pythons’.

**Input:** String

**Output:** String

**Solution:**

1. The program takes a string as input from the user.

2. Using the string.replace(sub\_string1, sub\_string2) method, the word ‘python’ is replaced with ‘pythons’. This method takes an input string and replaces every instance of sub\_string1 with sub\_string2.

3. The resultant string is printed on the console.

**Code:**

A computer code with colorful text

Description automatically generated

**Output:**

A black text on a white background

Description automatically generated

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

**Input:** Integer

**Output:** String

**Solution:**

1. The program takes an integer as input from the user and stores it in the "score" variable.

2. Using if and elif conditions, the value is checked for the criteria for a grade.

3. When the variable matches the condition, the corresponding print function is executed, and the grade is displayed on the console.

**Code:**

A screenshot of a computer program

Description automatically generated

**Output:**

A screen shot of a computer

Description automatically generated