**Note:**

**1) Make a copy of provided colab link**

**2) Write your code & execute it with the output cell in the colab or notebook**

**3) Share the final submission through  colab link or ipynb file**

**COLAB LINK:**<https://drive.google.com/file/d/1-jTrtkWvaRgvEn-Oz9cynlOmookL7SCc/view?usp=drive_link>

**1. Write a python program to print the addition of the two numbers and return the nearest value.**

**Constraints:**

**a. Take two numbers from user**

**b. Perform addition operation**

**c. Apply the logic to print the nearest value of the summation**

**Concepts to be used: while loop, if else**

**Sample Input:**

**enter a number: 2.3**

**enter a number: 4.5**

**Sample Output: 7**

**2.** **Write a python program to check whether a number is perfect or not**

**Constraints:**

**a. Take any number from user**

**b. Initialize count to 0**

**c. Apply the logic to check whether a number is perfect or not**

**(Perfect Number : 6 is a perfect number because the sum of factors of 6 is 6 (1+2+3 = 6. Whereas 5 is not a perfect number as sum of the factors of 5 is not equal to 5 (1 != 5)))**

**Concepts to be used: input & output functions, for loop, if else**

**Sample input & output -1:**

**Input: Enter a number:5**

**Output: Number is not perfect**

**Sample input & output -2:**

**Input: Enter a number:6**

**Output: Number is perfect**

**3. Write a python program to print the diamond pattern using #(hash) symbol.**

**Criteria:**

**a. Take number of rows from user**

**b. Create an upward pyramid using nested for loop**

**c. Create downward pyramid using nested for loop**

**d. Print the ‘#’ in diamond shape**

**Concepts to be used: for loop nested loops**

**Sample Input: Number of rows: 4**

**Sample Output:**

**#**

**# #**

**# # #**

**# # # #**

**# # # # #**

**# # # #**

**# # #**

**# #**

**#**