# Python Exercise Sheet

1. Write a Python program to:
   * Add two numbers
   * Subtract two numbers
   * Multiply two numbers
   * Divide two numbers and return both the remainder and the quotient.
2. Check the type of a variable assigned using the input function.
3. Write a Python program to calculate the square of a number entered by the user.
4. Write a program to detect double spaces in a string.
5. Write a program to format the following letter using escape sequence characters: "Dear professor, Our Students Have God Level Rizz, Thank you."
6. Can you change the values inside a list which is contained in set S = {(8, 7, 12), 'Harry', [1, 2]}?
7. Write a program to find the greatest of four numbers entered by the user.
8. Write a program to find out whether a student is pass or fail if it requires a total of 40% and at least 33% in each subject to pass. Assume three subjects and take marks as input from the user.
9. Write a program to find the factorial of a given number using a for loop.
10. Write a program to print the following star pattern for n = 3:

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1. Write a list comprehension to print a list that contains the multiplication table of a user-entered number.
2. Write a program to display A/B, where A and B are integers. If B is equal to 0, display "infinite" by handling the zero-division error.