**Assignment - I**

1. Take two integers a and b and print all composite numbers between a and b. (Both a and b are inclusive)
2. Print the following inverse hill pattern

**Example**

**Input 3**

**Output**

**\* \* \* \* \***

**\* \* \***

**\***

1. Check whether the given string is an anagram.
2. Reverse the characters in a sentence while keeping the words in their original order

**Example**

**Input Hello World**

**Output olleH dlroW**

1. Accept a string S. Replace the occurrences of 3 consecutive vowels with \* .

**Example**

**Input Aaahellooo**

**Output \*hell\***

1. Print an encrypted message by shifting every small letter in the sentence by -2 position and every capital letter by -3 position. You can assume there are no special characters except spaces and numeric value.
2. Given an English sentence, check whether it is a panagram or not. [A panagram is a sentence containing all 26 letters in the English alphabet]
3. Shift all zeros in a list towards right by maintaining the order of list.

**Example:**

**Input [0,1,0,3,2,12]**

**Output [1,3,2,12,0,0]**

1. Take two numbers N and K as input. Create a list L of length N and initialize it with zeros. Change the value to 1 of even indexes if k is even. Else change the value to 1 of odd indexes.

**Example**

**Input 5 2**

**Output [1 0 1 0 1]**

1. Given n indicating number of rows, print a right angled triangle of squares of numbers with n rows.

**Example**

**Input 3**

**Output**

**1**

**2 4**

**3 9 81**

1. Matrix addition using list comprehension
2. Matrix multiplication
3. Sum of diagonal elements in a matrix
4. Accept a list and print a tuple containing cubes of elements of L.
5. Sort a list of tuples based on the second element.
6. Check whether the given key exists in dictionary. Print the value.
7. Multiply all the values in a dictionary.
8. Display the frequency of words appearing in a string as a dictionary

**Example:**

**Input: hello hello how are you**

**‘hello’ :2, ‘how’ : 1** ]

1. Print the keys in a dictionary in alphabetical order.
2. Create a dictionary with name as key and marks of 3 subjects as values for 5 students. Print the name and average of marks as a dictionary.

**[ Write neatly in assignment sheets. Submit on 06/ 09/24]**