**SECURIN Coding Assessment**

**PART A:**

1. The question is to find the total combinations possible from rolling 2 dice.

Math used is n\*n where n is the total numbers in an array ranging from 1 to 6.

The result is 6\*6 = 36.

To find the length of the array I used enhanced for loop. And multiplied the length of both the loops (i.e., the dice).

1. The question is to calculate and display the distribution of all possible combinations that can be obtained when rolling both Die A and Die B together.

The possible combinations are (1,2), (1,2) ……… (6,6). We can print these combinations by building a nested for loop for I and j ranging from 1 to 6. Then we can print the values of I and j inside the loop.

1. The problem is to Calculate the Probability of all Possible Sums occurring among the number of combinations from 2.

To solve this, I created an empty array for storing the sums from 2 – 12. Then nested for loop is implemented to find the sum of elements and those sums representing the indices of the array, their array value is incremented i.e., a[i+j]++. Then to find the probability the value of each element in an array is divided by 11.

**NOTE: The java code file and output screenshot are attached in this folder. Visual Studio Code was used to solve this problem.**