**Day-22 of 101 days of coding challenge**

* **Inclusion-Exclusion Concepts:**
* **Suppose we have a two subject one math and English**
* **N1 student chosen math, N2 English and N3 both Now need to find total number of students------**
* **Total students = N1+ N2-N3 (because N3 counts in English and math both need to subtract from the number so that duplicate students can be removed)**

**Ques: how many numbers are divisible by 5 and 7 in between 1 to 100?**

**5 div = 5,10,15,20,25,30,35,40,45,50,55,60,65,70,75,80,85,90,95**

**7 div = 7,14,21,28,35,42,49,56,63,70,77,84,91,98**

**Code:-**

// how many numbers are divisible by 5 and 7 in between 1 to 100

#include<iostream>

using namespace std;

int main()

{

int c1 = 0, c2 = 0, c3 = 0;

int totalNumber;

for(int i = 1; i<100; i++)

{

if(i%5 == 0)

c1++;

if(i%7 == 0)

c2++;

if(i%5 == 0 && i%7 == 0)

c3++;

}

totalNumber = c1+c2-c3;

cout<<"Total Number divided by 5 and 7 is:"<<totalNumber<<endl;

return 0;

}

Output:-

