

# Programming Fundamentals

(CL214)

## Class Assignment 1

Individual assignment



**Deadline**

**6<sup>th</sup> February 2020**

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**CLO1**

**Show** memory maps (representation and alignment) of data structures such as struct, bit-fields, unions etc.

Give an array of positive integers. The task is to find the total sum after performing the bit wise OR operation on all the distinct sub arrays of the given array. Example is shown below:

1. Input must be taken from the user.
2. Number of bits of arrays must be asked from the user
3. First you have to print all the distinct sub arrays
4. Then you have to show the output of each sub array after performing OR operator
5. Then you have to show the final sum

Note: Predefined array will not get the credit.

1	2	3	4	5
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Sub array	Bitwise OR
{1}	1
{1,2}	3
{1,2,3}	3
{1,2,3,4}	7
{1,2,3,4,5}	7
{2}	2
{2,3}	3
{2,3,4}	7
{2,3,4,5}	7
{3}	3
{3,4}	7
{3,4,5}	7
{4}	4
{4,5}	5
{5}	5
Total	71