C++ Structures Lab Assignments 'A' 30-1-2023

1.	**Reading, adding, subtracting, multiplying and printing of complex numbers**
	 Write functions to add, subtract and multiply two complex numbers using structures. The functions should return structure and call them in main function.
	 struct complex
	 {
	   int real;
	   int imag;
	 };

2.	**Polynomial reading, addition, subtraction, printing.**
	 A polynomial is an expression that contains more than two terms. A term is made up of coefficient and exponent. The polynomial addition/subtraction is to add/subtract coefficient parts of the polynomials having same exponent.
	 Example: $P(x) = 4x^3+6x^2+7x+9$
	 --- sample code ----------
	 struct poly
	  {
	         int coeff;
	         int expo;
	  };
	  // declare three arrays p1, p2, p3 of type structure poly,
	  struct poly p1[10],p2[10],p3[10];
	  // functions
	    int readPoly(**struct** poly []) // returns the number of terms of the polynomial
	    int addPoly(**struct** poly [],**struct** poly [],**int** ,**int** ,**struct** poly []) // returns the number of terms of the resultant polynomial
	    int subPoly(**struct** poly [],**struct** poly [],**int** ,**int** ,**struct** poly []) // returns the number of terms of the resultant polynomial
	    void displayPoly(**struct** poly [],**int** terms)

3.	**Reading, Sorting, and printing of Array of structures** Write functions for read(), print() of array of structure of fields with : (rno is integer, sub-marks[4] is array of integer, total is integer) Write a function which fills/updates the filed total in each of the structure as per the marks. Then sort the array of structs according to total and prints all the details.

	Put effort in thinking
	 Get perfect in coding
	 ~ KR
	
	 "Curiosity is the art of creativity
	   Coding is the act of capability " ~KR
	
	 "Intelligence is to be balanced with Hard work
	    Hard work gets balanced with Intelligence"
	 ~ KR