1)

- A) declare and initialize an array of twenty 32-bit signed integers.
- B) define a function named "even\_sum", that takes two parameters.

The first parameter should be a pointer to a 32-bit integer to pass in the array and the second should be a 32-bit integer that you will use to pass the length of the previously declared array. The function should return the sum of the array elements with even indices.

- 2) Modify the previous function to also set all elements at odd indices to zero.
- 3) Define a struct with 4 members, each member should be an unsigned int. Declare an array with 5 of the previously defined structs.
- define a function named "zero\_structs", that takes 2 parameters. The first parameter should be a pointer to a struct of the previously defined type to pass in the array of structs, and the second should be a 32-bit integer that you will use to pass the length of the array. The function should set all members of the structs in the passed-in array to zero.
- Define a function named "fill\_structs", which takes 3 parameters. The first parameter should be a pointer to a struct of the previously defined type to pass in the array of structs, the second should be a pointer to a 32-bit integer to pass in the array from part one, and the third should be a 32-bit integer that you will use to pass the length of the integer array. The function should set the members of the structs in the passed-in array to the elements of the 32-bit integer array that you pass in (i.e. the first struct's members should have the first 4 values of the integer array, the second struct should have the next 4 values, etc.)