1. List the members of your group below:

2. List the indices of the array locations probed when the array `a` depicted below is searched for each of the following elements using *sequential search*:

   (a) 14

   (b) 18

   (c) 33

i	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
a[i]	23	57	36	92	18	63	43	75	12	40	14	97	98	31	5

3. Populate the following table for sequential search of the array in Question 2. Show your work and justify your answers.

	number of array probes		
	minimum	maximum	average
successful search:			
unsuccessful search:			

4. Reorganize the array of Question 2 for *binary search* and depict the resulting array below, using the tabular form used there.

5. List the indices of the array locations probed when the array `a` depicted below is searched for each of the following elements using *binary search*:

   (a) 14

   (b) 18

   (c) 33

6. Populate the following table for binary search of the array in Question 5. Show your work and justify your answers.

	number of array probes		
	minimum	maximum	average
successful search:			
unsuccessful search:			

7. Repeat Questions 5 and 6 using *interpolation search*.

8. Determine the *maximum contiguous subsequence* of the sequence

$$-3, 1, 3, 5, -10, 3, 38 - 1, 3, 10$$

and justify your answer.

9. Provide a linear-time algorithm for the maximum contiguous subsequence problem. Explain why it is correct and why its running time is linear.