



Searching

Work Sheet: 04-ALG-04-WS



Questions: (* questions can be used for evaluation)

1. Assume that you will take 1 second to search for a given number how long will it take to search the number 2

7	9	11	13	5	2	4	3	5
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2. How long will it take to search for the number 50, considering that it takes 1 second to look at each entry?

7	9	11	13	5	2	4	3	5
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3. Write the steps (algorithm) for searching for the number 3 from the numbers

1YY	9	3	12
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4. Now, consider that you and your friend are both searching linearly for a number in the following set of numbers. It takes 1 second to search every number.
- Can you suggest a way to search for the number 23, where searching can be made "fast"?
 - If you alone had searched for the number 23, how much time would you have taken?

1	3	5	7	9	11	13	15	17	Y
21	23	25	27	29	31	33	35	37	39

5. What if you and your friend were asked to search for the number 20?