

# Search algorithms practice

**Question 1.** Consider searching for the value  $x$  in the sorted list `ls` shown below.

```
String[] ls = {-20,  -4,   44,   58,   99,  145}
index      0    1    2    3    4    5
```

(a). How many steps does it take to search for the value 99 in the list using binary search? Show the steps in the chart below:

low	mid	high	ls[mid]
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(b). How many steps does it take to search for the value 30 in the list using binary search? Show the steps in the chart below:

low	mid	high	ls[mid]
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