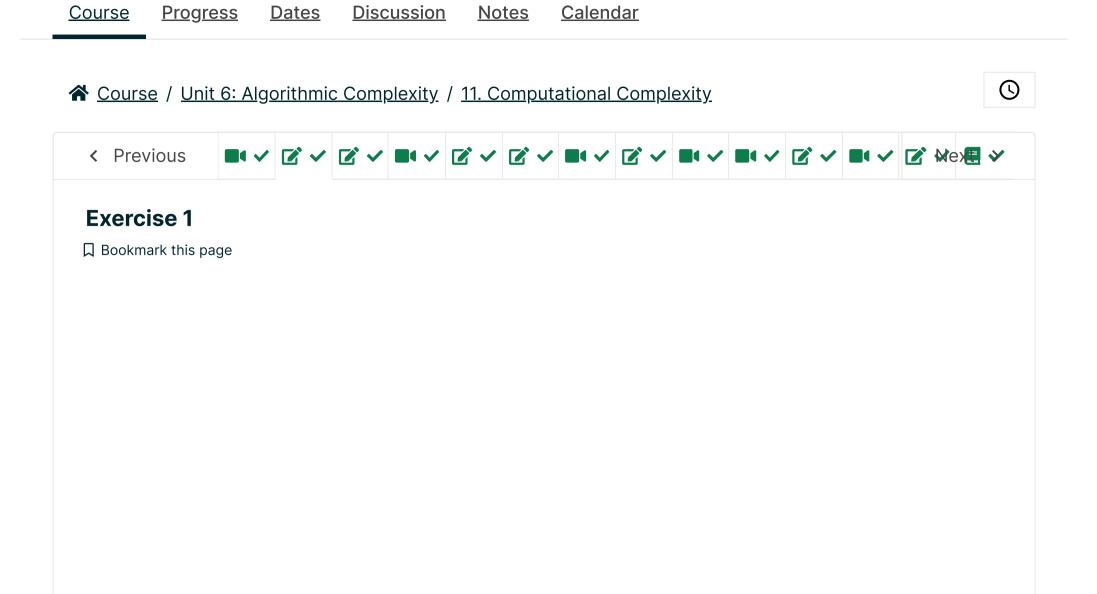
<u>Help</u>

shengtatng ~



Finger Exercises due Oct 27, 2022 07:30 +08 Completed

#### Exercise 1

5/5 points (graded)

#### **ESTIMATED TIME TO COMPLETE: 10 minutes**

Here is some code from lecture:

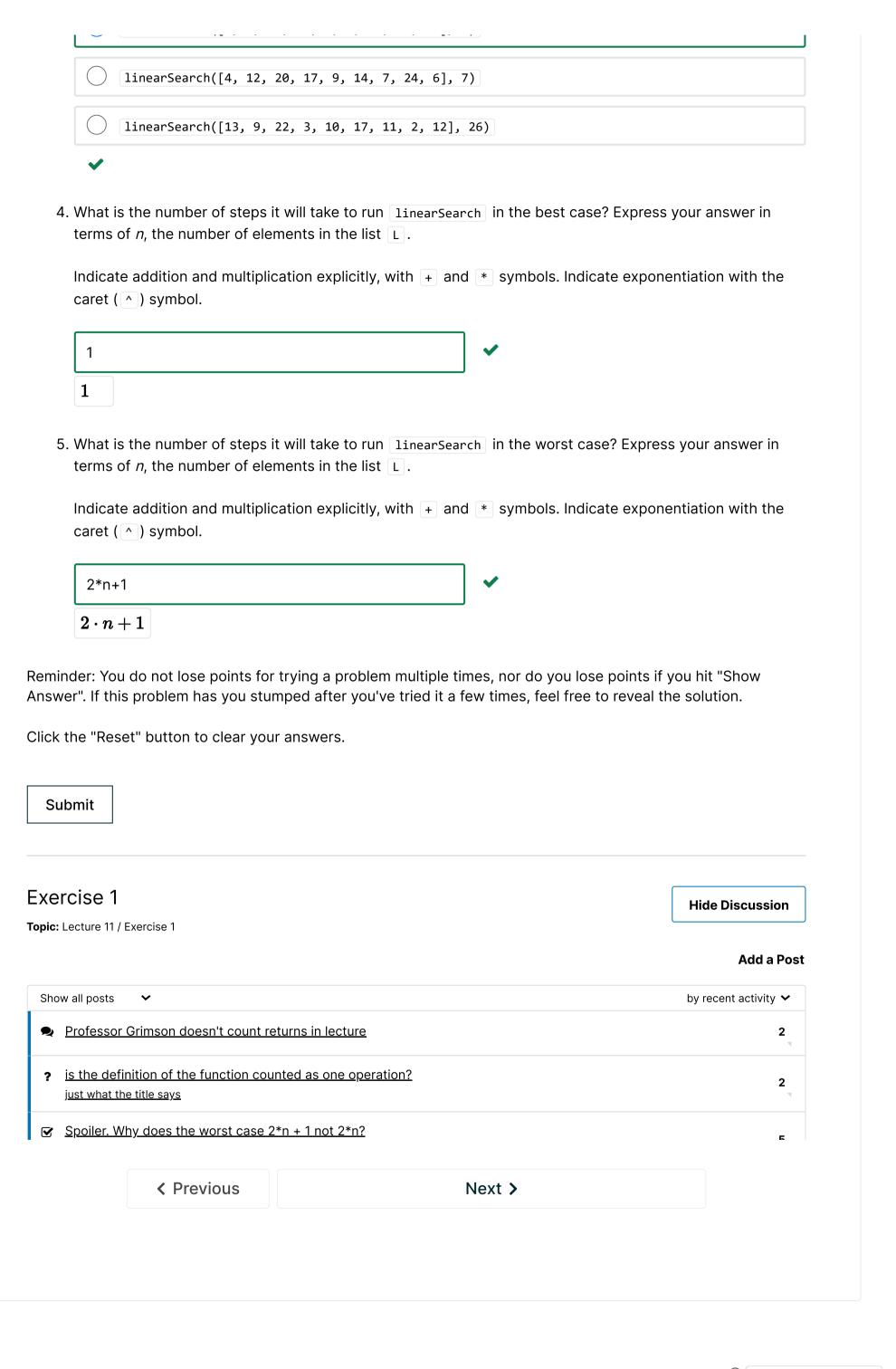
```
def linearSearch(L, x):
    for e in L:
        if e == x:
            return True
    return False
```

Choose which of the following inputs to [linearSearch] would give the best case, average case, or worst case run time.

```
1. Best Case Run Time
         linearSearch([14, 15, 6, 27, 13, 16, 25, 11, 7], 15)
         linearSearch([21, 1, 25, 22, 30, 13, 7, 24, 12], 24)
       linearSearch([20, 10, 1, 7, 4, 22, 25, 12, 31], 20)
         linearSearch([9, 3, 12, 24, 7, 8, 23, 11, 19], 8)
         linearSearch([4, 12, 20, 17, 9, 14, 7, 24, 6], 7)
         linearSearch([13, 9, 22, 3, 10, 17, 11, 2, 12], 26)
2. Worst Case Run Time
         linearSearch([14, 15, 6, 27, 13, 16, 25, 11, 7], 15)
         linearSearch([21, 1, 25, 22, 30, 13, 7, 24, 12], 24)
         linearSearch([20, 10, 1, 7, 4, 22, 25, 12, 31], 20)
         linearSearch([9, 3, 12, 24, 7, 8, 23, 11, 19], 8)
         linearSearch([4, 12, 20, 17, 9, 14, 7, 24, 6], 7)
         linearSearch([13, 9, 22, 3, 10, 17, 11, 2, 12], 26)
```

3. Average Case Run Time

```
linearSearch([14, 15, 6, 27, 13, 16, 25, 11, 7], 15)
linearSearch([21, 1, 25, 22, 30, 13, 7, 24, 12], 24)
linearSearch([20, 10, 1, 7, 4, 22, 25, 12, 31], 20)
```





## edX

<u>About</u>

**Affiliates** 

edX for Business

Open edX

<u>Careers</u>

**News** 

# Legal

Terms of Service & Honor Code

Privacy Policy

**Accessibility Policy** 

**Trademark Policy** 

<u>Sitemap</u>

### **Connect**

<u>Blog</u>

**Contact Us** 

Help Center

Media Kit















© 2022 edX LLC. All rights reserved.

深圳市恒宇博科技有限公司 <u>粤ICP备17044299号-2</u>