

1. First one
2. 10; ERROR; [10,20,20,30,30,'The End']; [10,5,30]; 40
3. 'I am Brown, I exist' ; 'I am White, I exist' ; I am Grey, I exist 'I hide' ; TypeError ; TypeError ;  
\_\_main\_\_.Animal
4. F
5. F
6. False?cuz order isn't guaranteed in a set so binary search wouldn't work reliably
7. F
8. F
9. Skip
10. True
11. True
12. True (ignore: after print)
13. F
14. skip/python tutor
15. 4th
16. None of the above
17. Skip
- 18a.

```
Shopping_list = {'potatoes': 3, 'carrots':2, 'eggs':3, 'peas': 30}
Stock = {'potatoes': 3, 'carrots':2, 'eggs':3, 'peas': 50, 'apples': 4}
Prices = {'potatoes': 30, 'carrots':20, 'eggs': 5, 'peas': 4, 'apples': 40}
```

18b.

```
for key in shopping_list:
    if stock[key] < Shopping_list[key]:
        print("Not enough food in this store")
        return False
    return True
```

18c.

```
total = 0
for key in shopping_list:
    total += shopping_list[key] * prices[key]
to_return = total <= limit
return (to_return, total);
```

18d.

```
# assume you have `stock` defined outside function
def go_shopping(limit, shop_list):
    if not enough_ingredients+(shop_list):
```

```
        return False
    enough, total = enough_money(limit, shop_list)
    if not enough:
        return "Go back to work"
    else:
        return total
```

- 19. Skip
- 20. 'FinalExam()'
- 21. Skip
- 22. Skip
- 23.

If either stack is empty, return another one.  
Create an empty stack `temp`  
Loop until either stack1 or stack2 is empty.  
On each iteration compare the tops and pop the smaller, then push it to `temp`  
  
If one of the stacks is not empty yet, loop pop and push each element to `temp`.  
  
Then loop again, pop, and push elements to one of the empty stacks to reverse an order.

- 24.

```
[lst[i] * i for i in range(0, len(lst), 2)]
```

- 25a. **AttributeError**: 'Final' object has no attribute 'x'
- 25b. x is an instance attribute of Exam, Final doesn't inherit it
- 26. Skip
- 27. Skip