Question - 1

Sequential Search ST

SCORE: **20 points**

Implement Get and Put methods for ***Sequential Search Symbol Table*** using ***Singly Linked List***.
Also, maintain the count of keys in Symbol Table with variable `n` for method `size()`.
Make all Unit tests to pass successfully.

Question - 2

Hash Table Collision Resolution for entries > slots

SCORE: **5 points**

Which Hash Table Collision Resolution strategy, may let you have a number of table entries greater than available slots?

- [x] Separate Chaining
- [ ] Open Addressing

Question - 3

Desired binary relations for java equals() method

SCORE: **5 points**

What are the minimum desired properties(binary relations) that must be satisfied by any java method for checking the equality of objects?

- [ ] Identity
- [ ] Asymmetric
- [x] Transitive
- [x] Non-null
- [ ] Irreflexive
- [x] Symmetric
- [ ] Partial Order
- [ ] Quasi-reflexive
- [x] Reflexive

Question - 4

SCORE: **5 points**

Help

Rank in Ordered Symbol table

Calculating the rank is one of the core operations while building Ordered Symbol Table.
Which one of the following explains the purpose of the ***rank(Key key)*** operation in the ordered symbol table?

- find the smallest key greater than input key
- calculates the count of keys that are less than the input key
- find the largest key smaller than input key
- calculates the count of keys that are greater than the input key