

Computer Science COMP-250B
Midterm, Feb 23, 2016, 13:05-14:25.
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1) Consider

$$f(n)=$$

a) Write ...

b) Why ...

[15%]

[10%]

[15%]

2)
Write ...
Explain ...

[15%]

3) Prove by mathematical induction that for $n \geq 1$...

[15%]

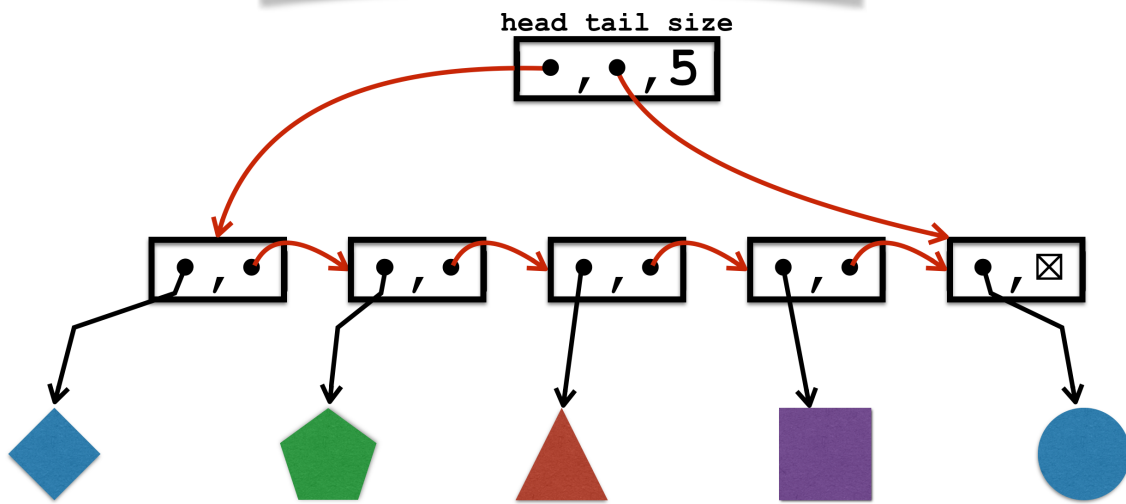
4)
Consider the following ...

...

Give ...

5) Consider the situation where you are given a Singly Linked List of objects as in *Lecture 5*. An example is given below :

```
class SLinkedList{
    SNode      head;
    SNode      tail;
    integer    size;
}
```



[10%] A) Write (Java-like) pseudo-code ...

[10%] B) Write (Java-like) pseudo-code ...

[10%] C) Write (Java-like) pseudo-code ...