CS????: Course Name
Homework ??

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Student ID: ?????????

Collaborators: No collaborators

Due: Day, Date

1 Problem 1

This is the description about the problem.

1.1 Problem 1 Part 1

Insert an image:

Figure 1: THIS IS ME!!!

1.2 Problem 1 Part 2

Proof example:

$$
\begin{aligned}
T(n) &= \sum_{i=2}^{\frac{1}{2}n-1} log(n - 2i) + T(0) \\
&= (log(n) + log(n-2) + log(n-4) + \cdots + log(2)) \\
&= (log(2 \cdot 4 \cdot \cdots \cdot (n-4) \cdot (n-2) \cdot n)) \\
&= log(2^{\frac{n}{2}}(1 \cdot 2 \cdot 3 \cdot \cdots \cdot \frac{n}{2})) \\
&= log(2^{\frac{n}{2}}(\frac{n}{2}!)) \\
&= \frac{n}{2}log(2) + log((\frac{2}{n})!)
\end{aligned}
$$

2   Problem 2

Table example:

i	$p(i)$	OPT(i)	Comparison(use v.s. not use)	interval i included(local)
0	N/A	0	N/A	N/A
1	0	OPT$(p(1)) + v_1 = 0 + 20 = 20$	OPT$(p(1)) + v_1$ ¿ OPT(1-1)	Yes
2	1	OPT$(p(2)) + v_2 = 20 + 18 = 38$	OPT$(p(2)) + v_2$ ¿ OPT(1)	Yes
3	0	OPT$(p(3)) + v_3 = 0 + 70 = 70$	OPT$(p(3)) + v_3$ ¿ OPT(2)	Yes
4	2	OPT$(4 - 1) = 70$	OPT$(p(4)) + v_4$ ¡ OPT(3)	No
5	1	OPT$(p(5)) + v_5 = 20 + 90 = 110$	OPT$(p(5)) + v_5$ ¿ OPT(4)	Yes
6	4	OPT$(6 - 1) = 110$	OPT$(p(6)) + v_6$ ¡ OPT(5)	No

Table 1: I actually lost 8 points for this wrong answer

3   Problem 3

Describe with unordered list:

- Point 1
- Point 2
- Point 3