Q2 (through OOP 1: classes)

• This is a preview of the published version of the quiz

Started: Nov 2 at 9:51am

Quiz Instructions

	Question 1	0.1 pts
	To avoid merge conflicts, it helps if edits on different branches are:	
	○ to the same file	
	○ to different files	
_ [
\supset	Question 2	0.1 pts
	The HEAD in git CANNOT do the following.	
	opoint to a branch that points to a commit	
	opoint directly to a commit	
	opoint to a tag that points to a commit	

Question 3 0.1 pts

For the purposes of complexity analysis, is it legitimate to count the following snippet of code, in its entirety, as a single step? Let N be the length of the my_input list.

<pre># BEGIN STEP if len(my_input) < print("hello") else: print("hello") print("world") # END STEP?</pre>	100:		
◯ True			
) False			

Question 4 0.1 pts

For the purposes of complexity analysis, is it legitimate to count the following snippet of code, in its entirety, as a single step? Let N be the length of the my_input list.

```
# BEGIN STEP
for i in range(len(my_input)):
    print("hello")
# END STEP?
```

○ True

○ False

Question 5 0.1 pts

For the purposes of complexity analysis, is it legitimate to count the following snippet of code, in its entirety, as a single step. Let N be the length of the my_input list.

```
# BEGIN STEP
for x in my_input[:100]:
    print(len(x))
# END STEP?
```

True

○ False

Question 6 0.2 pts

Let N be the length of nums. The following code is $O(N^{**}2)$. What optimization would make it be O(N)?

```
nums = ... # hidden

def avg(values):
    return sum(values) / len(values)

big_nums = []
total = sum(nums) # line A
count = len(nums) # line B
for x in nums:
    if x > sum(nums) / len(nums): # line C
        big_nums.append(x) # line D
```

- line C: replace "sum(nums) / len(nums)" with "avg(nums)"
- O delete lines A and B
- Line C: replace "len(nums)" with "count"
- line C: replace "sum(nums)" with "total"
- line D: replace the line with "print(x)"

Question 7	0.1 pts
	Question 7

What is TextIOWrapper for?

- of for converting bytes to str
- for compressing text
- for converting text to IO

Question 8	0.2 pts			
What is something htop shows?				
what the largest compressed file is in:	side of a zip file			
how much memory is being used				
○ how large a zip file is				
how much storage space is being use				