

# HW 2

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CSCI-350

## Question 1

1. A dog fell quickly!
2. A smart cat slept?
3. dog!?

## Question 2

No, it's not. There is only one path to achieve specific answers.

## Question 3

The largest string is infinite due to the infinite loop in `<verb> <adverb>` which goes to `<verb>` again.

## Question 4

Yes, it is.

```
cat!!

<words><punctuation>
<noun><punctuation><punctuation>
<noun><punctuation><punctuation>
cat<punctuation><punctuation>
cat!<punctuation>
cat!!
```

## Question 5

Yes, it is.

```
The ugly dog slept slowly.

<words><punctuation>
<article> <ns> <verb><punctuation>
<article> <adjective> <noun> <verb><punctuation>
<article> <adjective> <noun> <verb> <adverb><punctuation>
The <adjective> <noun> <verb><punctuation>
The ugly <noun> <verb> <adverb><punctuation>
The ugly dog <verb> <adverb><punctuation>
The ugly dog slept <adverb><punctuation>
The ugly dog slept slowly<punctuation>
The ugly dog slept slowly.
```

## Question 6

No, it's not.

```
A ugly balloon fell slept popped.

<words><punctuation>
<article> <ns> <verb><punctuation>
<article> <adjective> <noun> <verb><punctuation>
<article> <adjective> <noun> <verb> <verb>!!???...
```

## Question 7

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A ugly balloon fell!

<words><punctuation>

<article> <ns> <verb><punctuation>

<article> <adjective> <noun> <verb><punctuation>

<article> <adjective> <noun> <verb><punctuation>

A <adjective> <noun> <verb><punctuation>

A ugly <noun> <verb><punctuation>

A ugly balloon <verb><punctuation>

A ugly balloon fell<punctuation>

A ugly balloon fell!