1) Review:
   a. What is the result of the following code:

   ```python
   word = 'space'
   print(word)
   word = 'back' + word
   print(word)
   ```

   b. What is the result of the following code:

   ```python
   word = 'space'
   print(word)
   word = 'back' * 2 + word * 3
   print(word)
   ```

   c. What if we want to replace 'space' in 'backspace' with 'up'?

   ```python
   word = 'backspace'
   ```
2) Strings

a. What does the following code do?

```python
word = 'backspace'
found = False

for ch in word:
    if (ch == 's'):
        found = True
if (found == True):
    print("The word has an ‘s’.")
else:
    print("The word does not have an ‘s’.")
```

b. What does the following code do?

```python
word = 'backspace'
for index in range(len(word)):
    print(word[index])
```
c. Write a program that asks for an input phrase and finds the string ‘space’ within a phrase and reports the starting index where it was found. Do this without using any string methods.

d. Write a program that asks for an input phrase and finds the string ‘space’ within a phrase and replaces it with the string ‘up’. Do this without using any string methods.
e. What happens in the program you wrote above if the phrase input is “Use reverse to backspace into the parking space.”?

f. Write a program that asks for an input phrase and finds the first occurrence of the string ‘space’ within a phrase and replaces it with the string ‘up’. Do this without using any string methods.
3) String Methods
   a. What is the output of each of the following expressions? Assuming that:

   ```python
   str1 = "coach"
   str2 = "soccer"
   ```

   i. print(str1.upper())
   ii. print(str1.capitalize())
   iii. print(str2.count('c'))
   iv. print(str2.replace('cer', 'k'))
   v. print(str1.find('c'))
   vi. print(str1.rfind('c'))

   b. Write a program that asks for an input sentence, finds any occurrences of the string ‘teh’ and replaces them with ‘the’.
4) String Format Method
   a. What is the output of the following?
      
      i. `print('Hi {}!'.format("meg".capitalize()))`

      ii. `two = "2"
           three = 3
           print('{} {} {}'.format("1", two, three))`

      iii. `print('There are {:.2f}".format(8.349304))`

   b. Write a program that asks for an item name, the price of the package of the item and the quantity of the item in one package. The program should then calculate the cost per item and display a sentence such as:

      Each _____ costs $x.xx.

      Where the _____ is the name of the item.
      And $x.xx is the cost rounded to the nearest cent.