

1 A Hidden Message

Create a small program to print every other word in the following string, starting with the first word (this). You are only allowed to use "print" function once.

"this if is you not are a reading very this good then way you to have hide done a it message wrong"

Hints:

- Use String.split() to convert a string to a list
- Please print every the other words in a single line. You can add (concatenate) all of the words into a string, then just print a single string.

In []: ▶

2 Find the duplicate items

Write a Python program that takes two lists and print out all of their common members.

In []: ▶

```
list1 = [1, 2, 4, 56, 67, 78, 97, 52, 23, 46, 91, 13, 7]
list2 = [10, 2, 5, 57, 67, 79, 96, 52, 25, 47, 95, 14, 7, 101, 23, 44]
```

You output should be as the following:

```
2
67
52
23
7
```

3 write a program to add line number in front of each line in the following string

```
In [1]: ► essay = '''The Zen of Python
by Tim Peters

Beautiful is better than ugly.
Explicit is better than implicit.
Simple is better than complex.
Complex is better than complicated.
Flat is better than nested.
Sparse is better than dense.
Readability counts.'''

# write your code at below
```

Example output:

```
1) The Zen of Python
2) by Tim Peters
3)
4) Beautiful is better than ugly.
...
```

4 Chicken Story - 2

A rooster cost 5 dollars
A hen cost 3 dollars
Three baby chickens cost 1 dollars

Now you need to spend exactly \$100 to buy exactly 100 chickens, without any money left. How many rooster, hen and baby chickens should you buy? Note: There might be more than one solutions

```
In [ ]: ► total_num = 100
total_cost = 100

# Start your program here
```

5 Feed The Monkeys

A group of monkeies picked up some peaches on the first day. They ate half of them and gave another peach from the other half left to a baby monkey. On the second day, they ate half of what had left from previous day, and give another peach from the other half to a baby monkey. Every day they did the same, until on the 15th day, they found they only have 1 peach left.

Make a program, print out how many peaches those monkey had on each day, from day 15 to day 1.

For Example, your program should print out like the following:

```
day 15: 1
day 14: 4
day 13: 10
...
...
```