

Beginner Level

Ask the user to input their weight in pounds. Output the user's weight on different planets and the sun in lbs. Below is the surface gravity of each planet and the sun.

Mercury: 0.38
Venus: 0.91
Mars: 0.38
Jupiter: 2.34
Saturn: 1.06
Uranus: 0.92
Neptune: 1.19
Pluto: 0.06
Sun: 27.07

For Example:

Input

Please enter your weight (lbs) : 140

Output

```
Mercury: 53.2 lbs
Venus: 127.4 lbs
Mars: 53.2 lbs
Jupiter: 327.6 lbs
Saturn: 148.4 lbs
Uranus: 128.8 lbs
Neptune: 166.6 lbs
Pluto: 8.4 lbs
The Sun: 3,789.8 lbs
```

Intermediate Level

Write a function that will take a given string and reverse the order of the words, but with a string containing punctuation, output the reverse order of the words, but keep the punctuation in the same space.

You can assume the input will always be a string containing letters and punctuation separated by a single space.

For Example:

Input

```
Please enter a sentence or phrase : Sally said, "Please don't change the color"
```

Output

```
color the, "change don't Please said Sally"
```

Expert Level

Given an array of strings, output a binary search tree made up of the strings in an understandable format.

The properties that separate a binary search tree

1. All nodes of left subtree are less than the root node
2. All nodes of right subtree are more than the root node
3. Both subtrees of each node are also BSTs i.e. they have the above two properties

Hint: Find a root with an equal number of nodes that are less than and greater than it.

Input

```
[lake, fish, tree, grass, mud, boat, house]
```

Output

```
      fish
     /  \
  lake   grass
 /  \   /  \
mud boat tree house
```

OR

```
Root: fish
Left node of root: lake
Right node of root: grass
Left node of lake: mud
Right node of lake: boat
Left node of grass: tree
Right node of grass: house
```