My Spaceship

Subject | 2 Solutions | Additional Resources (0)

My Spaceship

Remember to git add && git commit && git push each exercise!

We will execute your function with our test(s), please DO NOT PROVIDE ANY TEST(S) in your file

For each exercise, you will have to create a folder and in this folder, you will have additional files that contain your work. Folder names are provided at the beginning of each exercise under `submit directory` and specific file names for each exercise are also provided at the beginning of each exercise under `submit file(s)`.

My Spaceship	
Submit directory	ex00
Submit file	my_spaceship*
	It needs to be completed in the

Control Center

roup formation
Progress
ubmitted
est review
Finished: approved

Go To DoCode

Access:
READ WRITE
Go To Gitea

Keep Working On This Soluti

Looking for a group

Languages	language you are working on right now. If you are doing Bootcamp Javascript, then javascript (file extension will be .js). If you are doing Bootcamp Ruby, then Ruby (file extension will be .rb). It goes the same for Python, Java, C++, Rust, ...

Description

You have been recently been hired by SpacePro, a new rocket manufacturer, and have been tasked with designing a simulator for their spaceships. This simulator creates a virtual “space” and keeps track of the basic movements and direction of a given ship. Your job is to keep track of where the ship is and it’s orientation relative to its starting point.

Instructions

Your ship simulator must take in a string of letters that represent a planned flight path for a given rocket ship.

In a ship’s flight path there are only 3 valid options for movement; R for turning right, L for turning left and A for advancing.

If, for example, you receive “RRALAA” as your flight path, you should interpret it as the following:
Turn right, turn right, advance, turn left, advance, advance
Once given this initial flight path, your program must return the x,y coordinates of a ship’s final destination as well as it’s orientation relative to the starting point.

Orientation is represented as left, right, up or down.

Space is infinite, so the x,y coordinates you return could be placed on a seemingly infinite grid and can be negative or positive values.

So let's say an upward facing rocket ship leaves its starting point of 0,0 and is given the flight path of “RRALAA”, it’s final location will be 2,-1 and it will be facing right.

Your Job

lucas_v

Also working on the project


abdullay_b

rasulov_d

suxrobov_s

risaliev_e

xujamura_d

to-xtasi_a

rahmono_az

isakov_a

asomov_u

axmadxo-_j

sodiqov_o

alpeisso_n

sultonov_x

nigmatu_mu

begimqul_g

xudaboye_s

norxojay_o

stupakov_k

sodikov_ar

sultanba_y

Just finished


parpiev_s

diyarova_s

muhiddin_s

uktamov_s

zharas_g

orifjono_a

g-ofurov_s

isakov_a

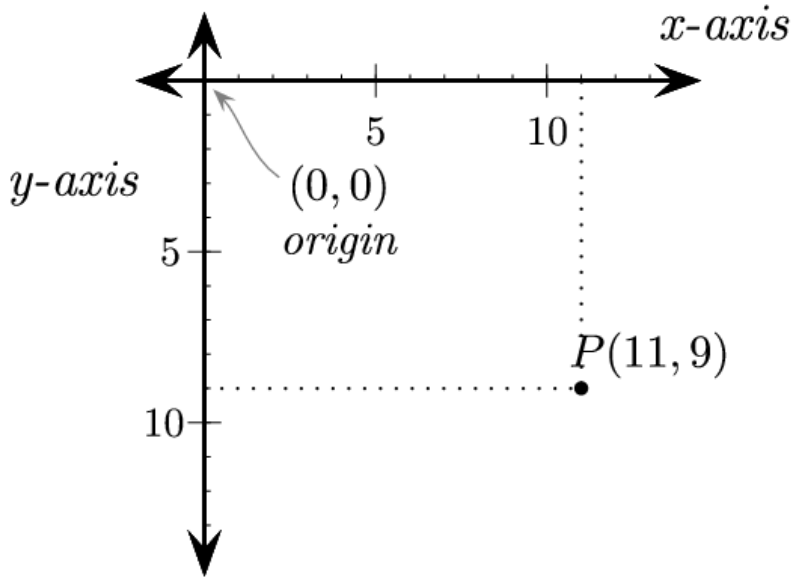


You must create a function that takes in a flight path of a rocket ship as a string of letters and returns the following format:
"{x: X, y: Y, direction: 'DIRECTION'}"
X,Y represent the ending coordinates of your ship and direction represents its final direction.

Notes

Function my_spaceship returns a *STRING*.

We are using Computer Graphics Coordinate System



All spaceships will start at 0,0 and will face up
Moving left/right will influence X and moving up/down will influence Y

Example 00

```
Input: "RAALALL"
Output:
Return Value: "{x: 2, y: -1, direction:
'down'}"
```

Example 01

```
Input: "AAAA"
Output:
Return Value: "{x: 0, y: -4, direction:
'up'}"
```

Example 02

abdurahi_a yusupov_f abduhaki_b qayumov_s
radjapov_i xudaboye_s musayev_s tsay_d

Type: Project
Group Size: 1 Participant
Review system: Test Review (Gandalf)
Difficulty: Initiation
Average duration: 1 Week

Project's Metadata

Project

id: 529

name: my_spaceship

visible: True

```
Input: ""
Output:
Return Value: "{x: 0, y: 0, direction:
'up'}"
```

Example 03

```
Input: "RAARA"
Output:
Return Value: "{x: 2, y: 1, direction:
'down'}"
```

Tip
(In C)
In C, you can use snprintf.