

Karel Assignment

Divide a given map into 4 equal chambers – take into consideration the special cases such as small maps that can't be divided into 4 chambers equally and divide them into the maximum possible number of equal chambers.

Notes:

- Assume having enough number of beepers (say 1000) in Karel's bag. You can use the API to setup an initial value of the beepers.
- You can't use the classes API to solve the assignment, and you should be using only the functions given in Karel reference card. Karel is a black box that came out of the factory with certain capabilities according to its reference card. The only exception to that is initializing Karel's bag with beepers.

Optimize your solution as follows:

- Karel should achieve his task with the lowest number of moves. Add a moves counter to your code and print it while Karel is moving.
- You should minimize the number of lines in your code to the lowest possible number of lines by writing reusable functions.

Deliverables:

- Homework.java
- A report in pdf format that shows how you solved the problem and your optimizations.
- A video that explains your solution with the optimizations that is no longer than 10 mins. Start your video by running your code and showing how your solution works. Upload your video on Youtube as non-public listing and send the link only.
- In summary the deliverables are: Homework.java, report.pdf, and a link to Youtube video.