Programming assignment 3.

Suggested due date: Monday, October 23 2017 at 07:45pm

Remember:

You can remove all the variables from the workspace by writing "clear"

Look up the description of all the functions in MATLAB by typing doc in the command window.

Write a function to find the **k^{th} least element** on a given array with a running time of *O(n)*.

(***Hint***: Use partitioning algorithm)

1. Request the user to enter a positive integer, and call it **n**.
2. Generate **n** random integers between *-100* to *100* and save them in array **a**. *(You can use randi function in MATLAB)*
3. Print the generated array.
4. Request the user to enter a number between *1* to *n* (as the k^{th} least element).
5. Call your implemented function to find and print the k^{th} least element.