Extending the Robot class

You are being tasked with creating a special kind of Robot. A robot that is specially trained to defuse the bombs found in a hallway. In order to simulate this behavior, we are going to use our Karel the Robot package and test our algorithm virtually using beepers to represent bombs and walls in the world to represent walls in rooms and hallways.

Since there are methods that we might want to use often, let's extend the Robot class.

When you extend a class, you are creating a more specialized version of that class.

Remember*: "Every class has a constructor."*
Also *: "Every constructor calls the superclass' constructor"*

Our robot class will have the extra abilities including:

findTunnel()

which has a Robot find the entrance to the tunnel. You do not know the starting location or direction of the robot and it should work no matter the starting state. The robot ends up standing just outside the tunnel

int navigateTunnel()

which has the Robot go to the end of the tunnel counting as it goes. Assume the robot is standing just outside the tunnel at the start. The function returns the number of steps until it found the end.

int[] getLocation()

which returns an array of int that represent the street and avenue of the Robot's current Location

int pickUpPile()

which picks up all beepers at the current location and returns the number of beepers that got picked up.

int[] exitAndClean(int[] arr)

exits tunnel and picks up all piles of beepers along the way. Fills the specified array with sizes of beeper piles that were picked up. Returns the location of the highest beeper pile.