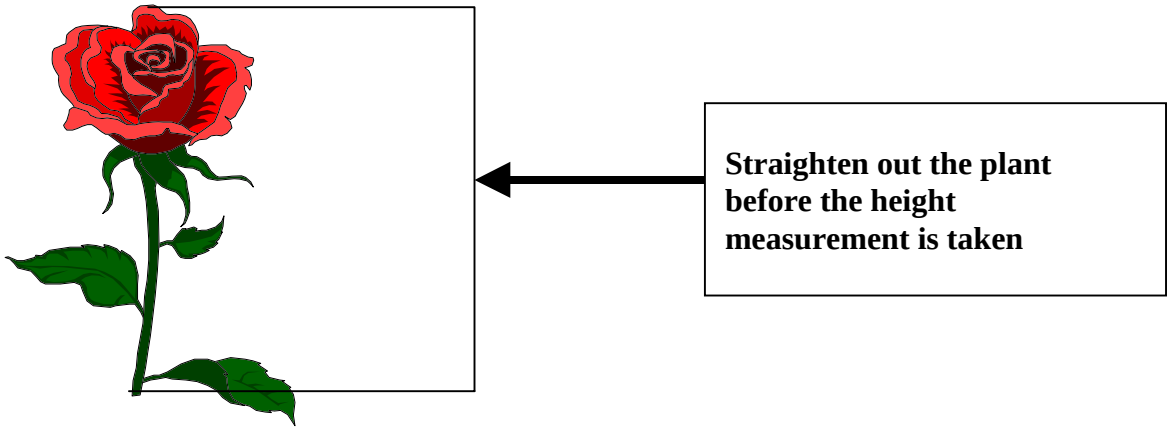
PLANT-GROWTH EXPERIMENT

4. Data Collection

We are now ready to plant the seeds. For each pot, make sure the proper treatment combination is being used. Label each pot with an identification tag that indicates the seed type and watering plan. Also, to minimize the effect of the uncontrollable factors, make the amount of soil and the position of the seed with regard to depth and distance from edge of pot as consistent as possible. Use a balance the measure the amount of soil used and meter stick to measure depth and distance.

Set the pots in their locations. You should make sure that all 24 plants receive approximately the same amount of light.

Water your plants according to the treatment combination assigned. Do not deviate from your set watering schemes, even if the plants do not appear healthy.



Think about how height will be measured and stick with that rule. For example, if your plant is of the droopy variety, then you might choose to straighten out the plant before the height measurement is taken. If so, you should do this every time the height is measured.

Our collected data in millimeters are displayed in the table below:

HEIGHT		WATERING PLAN			
		1	**2**	**3**	**4**
SEED	**1**	35 37	38 38	41 39	45 43
	2	31 33	39 37	44 40	47 45
	3	38 38	34 36	39 37	46 44

We will store our data in an SPSS worksheet with the three variables: seed, water, and height. These data are available in the SPSS file *plant1.sav* located on the FTP server in the Stat337 directory.

The following is a description of the variables in the data file:

Column	**Name of Variable**	**Description of Variable**
1	SEED	Seed Variety (an integer from 1 to 3)
2	WATER	Water level (an integer from 1 to 4)
3	HEIGHT	Height of plant (in millimeters)