

## Task 1 – Sensing

Please find the *code.py* file in the folder *Task1\_Practice*. Modify the *code.py* to accomplish the following:

## Given:

A set of test images, each containing

- A shotgun with variation in position and orientation, and
- A set of balloons with letters (target) which are evenly spaced in horizontal direction

Test Images for this task are found at: *Task1\_Practice/test\_images*For example,

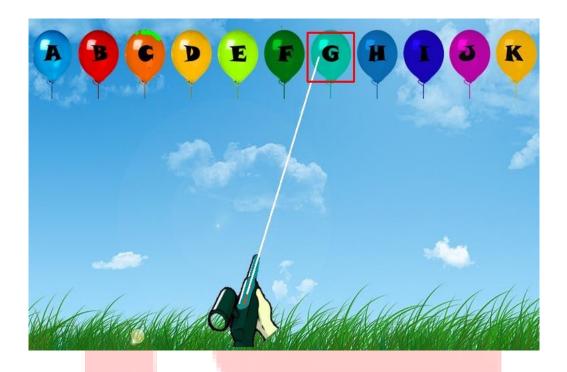


Figure 1: TestImage1



## **Problem Statement:**

- Assume that the shotgun shoots in a straight line, and therefore at one of the evenly spaced balloons
- Modify the **play (img)** function in the *code.py* file to take the test image as input and return the letter on the balloon that has been shot
- For example, given the above test image (Figure 1) as input, the value returned by the play (img) function is 'G'



## To do:

1. Open *code.py* in idle and add the code in the snippet code which looks like:

```
def play(img):
'''
img    -- a single test image is taken as input argument
letter -- returns the single character specifying the target that was
hit eg. 'A', 'D', etc
'''
#add your code here
return letter
```

- **2.** Modify the *code.py* file to accomplish the aforementioned task.
- **3**. Once done, save the file as **#TeamID\_Sensing.py** and put it in the **#TeamID\_sensing** folder.