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

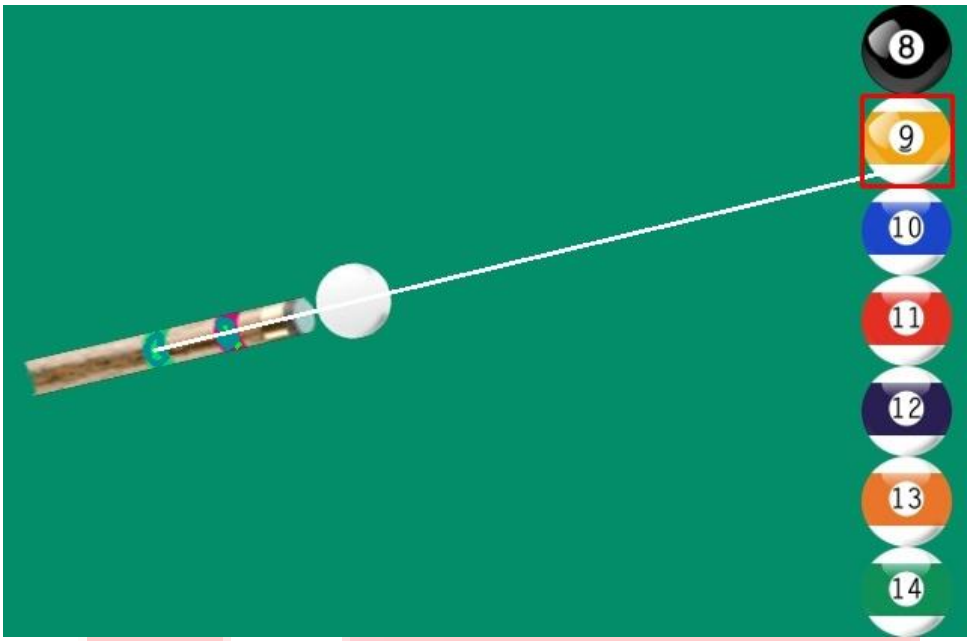
- A pool cue stick with variation in position and orientation, and
- A set of pool balls with numbers (target) which are **evenly spaced** in vertical direction

Test Images for this task are found at: *Task1_Practice/test_images*
For example,

Figure 1: TestImage1

Problem Statement:

- Assume that the pool cue stick shoots striker ball in a straight line, and therefore hit at one of the evenly spaced pool balls
- Modify the **play (img)** function in the *code.py* file to take the test image as input and return the number on the pool ball that has been shot
- For example, given the above test image (Figure 1) as input, the value returned by the **play (img)** function is **'9'**



To do:

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

```
def play(img):
    '''
    img    -- a single test image is taken as input argument
    ball_number -- returns the single integer specifying the target that
    was hit eg. 1, 5, etc
    '''
    #add your code here
    return ball_number
```

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.