1. Write a function called `saveSensors` which takes an integer parameter, `n`. The function should store `n` light sensor readings from the robot in a list. The function should return the list. Light sensor readings can be obtained by using the function `getLight("center")`.

2. Write a function which takes an integer, `n`, as a parameter. It that will print the numbers 1,2,3,…`n` in that order. You must use only a FOR loop. When you have that working, re-write the function to use only a WHILE loop.

3. What is printed when the following code is executed?

   ```python
   l = ["open", "close", "in", "out", "up", "down"]
   for i in range(0,6,2):
       print l[i]
   ```

4. Assume `turn90degrees()` has been defined as below so that the robot turns 90 degrees to the right. Assume `nudge(x)` has been defined to move the robot forward `x` units.

   ```python
   def turn90degrees():
       turnRight(1,1)
   
   def nudge(x):
       forward(1,x)
   ```

   The following code makes the robot draw the trajectory on the right.

   ```python
   nudge(1)
   turn90degrees()
   nudge(1)
   nudge(2)
   ```

   Draw the robot's trajectory when the following code is executed. Label the length of each move (nudge) using numbers as in the above example.

   ```python
   turns = [2,6]
   for index in [2,2,6,2,1]:
       if index in turns:
           turn90degrees()
       nudge(index + 1)
   ```
5. The following code has been executed in IDLE. For each print statement below, write what should be printed.

```python
>>> mylist = ["Hello", 88.5, 100, "cs190"]
>>> print len(mylist)
>>> print mylist[0]
>>> print mylist[len(mylist)]
>>> print mylist[2:]
>>> print mylist[0:2]
``` 
```python
>>> mylist.append(140)
>>> print mylist
>>> mylist[0] = 4
>>> mylist[3] = 200
>>> print mylist
``` 
```python
>>> mylist.sort()
>>> print mylist
>>> mylist.reverse()
>>> print mylist
``` 

6. Examine the following code. Draw a sketch of what would be shown on-screen if the `draw` function were called.

```python
def draw():
    pic = takePicture()
    for x in range(getHeight(pic)):
        for y in range(0, getHeight(pic)):
            pix = getPixel(pic, x, y)
            if x == y:
                setRed(pix, 0)
                setGreen(pix, 0)
                setBlue(pix, 0)
    show(pic)
``` 

7. Act like the python interpreter and "run" the following program. What does this program print?

```python
def fun1(x):
    print "Fun1 x: ", x
    return x * 2

print "Start"
y = fun1(10)
```
if (5 > y):
    print y
elif (15 > y):
    print y + 10
elif (25 > y):
    print y + 100
elif (35 > y):
    print y + 1000
else:
    print y + 10000

print "End"