Python Quiz Review #2

This assignment is designed to help you do well on the quiz we're doing Thursday. Number the parts of your program as shown. If we have time and you are done call me over to check off your work.

Create a Python program called "day27_review" saved on your Z: drive. Put your name in a comment at the top. Do all of the following in that program:

1.   Write a print line that prints a random integer between 17 and 29 inclusive. The print-out should look like this (except it should only sometimes be 22, since it's random):

```
1. Random number: 22
```

2.   Write a for loop that prints the numbers 4 through 8, one # on each line. It should look like this:

```
2. for loop:

4
5
6
7
8
```

3.   Write a for loop to print the numbers 4 through 48 in 5 columns using .rjust(7) like this:

```
3. for loop with columns:

      4       5       6       7       8
      9      10      11      12      13
     14      15      16      17      18
     19      20      21      22      23
     24      25      26      27      28
     29      30      31      32      33
     34      35      36      37      38
     39      40      41      42      43
     44      45      46      47      48
```

4.   Write code that uses a try/except structure with an input command to request a negative integer value from the user. The code needs to ask the user for a negative integer x and verify it is negative, then print the number. Include one error message to the user on ValueError and a different one if the number is not negative. Here is sample output:

```
4. try/except:

Please enter a negative integer: abc
That is not an integer, please try again.
Please enter a negative integer: 14
That is not negative, please try again.
Please enter a negative integer: -7
Thanks! -7 is negative and it is an integer.
```

5. Write code to create a list with your three favorite colors in it, then print the list using a for loop, one color per line. Do not use a break command.

```
5. Favorite colors:

Yellow
Green
Blue
```

6. I put some test scores into a list variable as shown. Write code that **uses a for loop** to go through the list and reports how many numbers are smaller than 60 and adds them up. Please do not just print "2". Write a **for loop** to check each number, then print out your results as shown in the sample below. Start this section with the following line:

```
scores = [81,45,98,53,64,84,77,60,93]
```

   Sample output:

```
6. List processing:

There are 2 numbers less than 60, they add to 98
```

The idea of the above is that if I changed the list of numbers, your code would still check all the numbers and count how many were less than 60; in other words, the code that processes the list is not dependent upon this specific list.

7. Turtle: write a program that draws ten dots in a row <u>using a for loop</u>, where the dots start at size 10 and go to size 100 and each dot is a random color chosen from a list you make of at least five colors. Here is an example:

Your drawing does not need to be exactly like mine, but the dots should go from left to right, start at size 10 and end at size 100, and be different colors. It's OK if they overlap a bit, but you should be able to see them all.