Practice Problems for Functions

Here are a few problems you can use to practice writing functions on paper.

1. Write a function PrintStars() that prints a string of 5 “*” characters.
   ```python
def main():
    PrintStars()
    print “bob”
    PrintStars()
```
   will print
   
   ******
   bob
   ******

2. Write a function PrintNStars(n) that prints a string of n “*” characters.
   ```python
def main():
    PrintNStars(8)
    print “bob”
    PrintNStars(3)
```
   will print
   
   ********
   bob
   ***

3. Write a function Stars(n) that returns a string of n “*” characters.
   ```python
def main():
    decoration = Stars(5)
    print “%s bob %s” %(decoration, decoration)
```
   will print
   
   ***** bob *****

4. Write a function IsLetter(s) that returns True if s is a single letter in the alphabet (upper case or lower case) and returns False for any other input. So IsLetter(‘a’) returns True, while IsLetter(‘$’) returns False

5. Write a function ISQR(n) that returns the largest integer whose square is less than or equal to number n. If we have the main function
   ```python
def main():
    x = ISQR(24)
    print x
```
this will print 4. You can assume that $n$ is a positive number. Do this with a loop, not with the Math library’s square root function.

6. Write a function PrintFunny(s) that prints string s if it does not contain the letter ‘b’, and prints “bob” if s does contain the letter ‘b’. For example
   
   ```python
   def main():
       PrintFunny(“Oberlin College”)  
       PrintFunny(“Marvin Krislov”)
   ```
   
   will print
   bob
   Marvin Krislov