

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.

```
def main():
    PrintStars()
    print( "bob" )
    PrintStars()
```

will print

```
*****
bob
*****
```

2. Write a function PrintNStars(n) that prints a string of n “*” characters.

```
def main():
    PrintNStars(8)
    print(( "bob" ))
    PrintNStars(3)
```

will print

```
*****
bob
***
```

3. Write a function Stars(n) that returns a string of n “*” characters.

```
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

```
def main():
    x = ISQR(24)
    print( x )
```

this will print 4. You can assume that n is a positive number.

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

```
def main():
    PrintFunny( "Carmen Ambar" )
    PrintFunny( "Donald Trump" )
```

will print

bob

Donald Trump

7. Write a function NoSpaces(s) that returns a string just like string s but with all of the blank spaces removed. So print(NoSpaces("How does this work?")) will print “Howdoesthiswork”