

Functions and Modules

August 2017

1. Write a program that will print a 4 by 4 matrix of stars:

```
*   *   *   *  
*   *   *   *  
*   *   *   *  
*   *   *   *
```

2. Write a program that will print out all numbers from 1 to 10. Each number should be printed on a separate line and there should be another blankline after each number.
3. Write a program that will accept 5 words from the user. Print these words in alphabetical order.
4. Write a program that will accept some user input. Count the how many characters in the input are alphabetical, how many are numerical, and how many are neither. Print out these values.
5. Predict the output of the following code:
6. Take a user input of form MM/DD/YYYY, convert it into a string of form **Day Month Year** and print the string. You will need to split the string that the user enters at the / characters (use the split() method) and then use the three substrings to construct a new string. For example, input of 11/21/1989 would produce output **21 November 1989**.
7. Write a program that can take a string as user input and return that string backwards. (Hint: do not use a palindrome as user input to test your program, it could result in you getting a headache). (Challenge: if you are good with the help function, you may be able to find a way to do this question in no more than 3 lines).