PGR107 – Python Programming
Spring 2023
For Loop

1. What do these loops print?

```
a. for i in range(1, 10) :
       print(i)
b. for i in range(1, 10, 2) :
       print(i)
c. for i in range(10, 1, -1) :
       print(i)
d. for i in range(10) :
       print(i)
e. for i in range(1, 10) :
       if i % 2 == 0 :
           print(i)
```

2. Write programs using **for loop** that read a line of input as a string and print
   a. Only the uppercase letters in the string.
   b. Every second letter of the string.
   c. The string, with all vowels replaced by an underscore.
   d. The number of digits in the string.
   e. The number of vowels in the string.

3. Write a program using **for loop** that reads a word and prints each character of the word on a separate line. For example, if the user provides the input "Harry", the program prints

```
H
a
r
r
y
```

4. Write a program using **for loop** that reads a word and prints the word in reverse. For example, if the user provides the input "Harry", the program prints

```
yrraH
```

5. Write a program using **nested for loop** to produce the following shape.

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

6. Write a program using **nested for loop** to draw the following shapes.

```
XXXXX
XX
XXXXX
XX
XX



XX
XX
XX
XX
XXXXX
```