

String formatting in Python

Lab 10

03/28/18

Formatting expressions

```
>>>'This is a %s string with a number : %d  
and a floating point: %f ' % ('example',  
42, 3.14)
```

- % operator allows string concurrent substitutions within a string.
- Allows specification of justification, minimum width, precision etc.

Formatting expressions

s	String
c	Int or str
d	decimal
e	Floating point with exponent (lower case)
E	Floating point with exponent (upper case)
f	Floating point
g	e or f

```
>>>'%d | %f | %s' % (25, 3.141592653589793116,'test')
```

```
>>>'%-10d | %f | %s' % (25,3.141592653589793116,'test')
```

```
>>>'%d | %10.5f | %s' % (25,3.141592653589793116,'test')
```

Working with Lists

- `myList = [1,2,3,4,5]`
- `for x in myList:`
 `print x`

`String.rstrip()`

`List.append()`

`List.reverse()`

`String.center(10)` #10 is the widthx

Working with Lists

```
for x in myList:  
    Do something with x  
    print x  
print done
```

String.rstrip()

List.append()

List.reverse()

```
sl=['*', '**', '***', '****', '*****']
```

Using these functions with * produce the shapes shown

In increasing order :

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

In decreasing order :

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

Hill :

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

Tree :

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

Rhomboid :

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

Create a sparse matrix

- From the GSE matrix file load only expression values ≥ 12