

Python Programming

String Formatting 2

Mostafa S. Ibrahim

Teaching, Training and Coaching since more than a decade!

Artificial Intelligence & Computer Vision Researcher

PhD from Simon Fraser University - Canada

Bachelor / Msc from Cairo University - Egypt

Ex-(Software Engineer / ICPC World Finalist)



Width Formatting

```
2   for i in range(0, 20, 2):
3       print('Given i={0}: i^4 = {1} i^3 = {2}'.format(i, i*i*i*i, i*i*i))
4
5   """
6   How to format to view nicely?
7
8   Given i=0: i^4 = 0 i^3 = 0
9   Given i=2: i^4 = 16 i^3 = 8
10  Given i=4: i^4 = 256 i^3 = 64
11  Given i=6: i^4 = 1296 i^3 = 216
12  Given i=8: i^4 = 4096 i^3 = 512
13  Given i=10: i^4 = 10000 i^3 = 1000
14  Given i=12: i^4 = 20736 i^3 = 1728
15  Given i=14: i^4 = 38416 i^3 = 2744
16  Given i=16: i^4 = 65536 i^3 = 4096
17  Given i=18: i^4 = 104976 i^3 = 5832
18  """
```

Width Formatting

```
2 for i in range(0, 20, 2):
3     print('Given i={:2}: i^4 = {:7} i^3 = {:4}'.format(i, i*i*i*i, i*i*i))
4
5 """
6 {1:7}: Format position 1 in field of 7 spaces
7
8 Given i= 0: i^4 =      0 i^3 =    0
9 Given i= 2: i^4 =     16 i^3 =    8
10 Given i= 4: i^4 =    256 i^3 =   64
11 Given i= 6: i^4 =   1296 i^3 =  216
12 Given i= 8: i^4 =   4096 i^3 =  512
13 Given i=10: i^4 =  10000 i^3 = 1000
14 Given i=12: i^4 =  20736 i^3 = 1728
15 Given i=14: i^4 =  38416 i^3 = 2744
16 Given i=16: i^4 =  65536 i^3 = 4096
17 Given i=18: i^4 = 104976 i^3 = 5832
```

Width Formatting

```
1
2 for i in range(0, 20, 2):
3     print('Given i={:<2}: i^4 = {:<7} i^3 = {:<4}'.format(i, i*i*i*i, i*i*i))
4
5 """
6 Using :<7 makes it left-aligned
7
8 Given i=0 : i^4 = 0      i^3 = 0
9 Given i=2 : i^4 = 16     i^3 = 8
10 Given i=4 : i^4 = 256    i^3 = 64
11 Given i=6 : i^4 = 1296   i^3 = 216
12 Given i=8 : i^4 = 4096   i^3 = 512
13 Given i=10: i^4 = 10000  i^3 = 1000
14 Given i=12: i^4 = 20736  i^3 = 1728
15 Given i=14: i^4 = 38416  i^3 = 2744
16 Given i=16: i^4 = 65536  i^3 = 4096
17 Given i=18: i^4 = 104976 i^3 = 5832
18 """
```

Width Formatting

```
2 for i in range(0, 20, 2):
3     print('Given i={:2}: i^4 = {:<7} i^3 = {:^4}'.format(i, i*i*i*i, i*i*i))
4
5 """
6 :7 right-aligned
7 :<7 left-aligned
8 :^7 center-aligned
9
10 Given i= 0: i^4 = 0      i^3 = 0
11 Given i= 2: i^4 = 16     i^3 = 8
12 Given i= 4: i^4 = 256    i^3 = 64
13 Given i= 6: i^4 = 1296   i^3 = 216
14 Given i= 8: i^4 = 4096   i^3 = 512
15 Given i=10: i^4 = 10000  i^3 = 1000
16 Given i=12: i^4 = 20736  i^3 = 1728
17 Given i=14: i^4 = 38416  i^3 = 2744
18 Given i=16: i^4 = 65536  i^3 = 4096
19 Given i=18: i^4 = 104976 i^3 = 5832
20 """
```

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”