



DISCIPLINA: FUNDAMENTOS COMPUTACIONAIS – CES 111

ALUNO:

2ª Lista de Exercícios de CEDS 111

A lista deve ser entregue até o dia 13/06/2018, com as respostas armazenadas em um arquivo extensão pdf, que deve ser enviado para o e-mail lmialaret@gmail.com, com o assunto “2ª Lista de Exercícios – CES 111”.

Exercise

Translate the following into Python algebraic or Boolean expressions and then evaluate them:

- a) The difference between Annie's age (25) and Ellie's (21)
- b) The total of \$14.99, \$27.95, and \$19.83
- c) The area of a rectangle of length 20 and width 15
- d) 2 to the 10th power
- e) The minimum of 3, 1, 8, -2, 5, -3, and 0
- f) 3 equals 4-2
- g) The value of 17//5 is 3
- h) The value of 17%5 is 3
- i) 284 is even
- j) 284 is even and 284 is divisible by 3
- k) 284 is even or 284 is divisible by 3

Exercise (cont.)

Write Python expressions involving strings *s1*, *s2*, and *s3* that correspond to:

- a) '11' appears in *s3*
- b) the blank space does not appear in *s1*
- c) the concatenation of *s1*, *s2*, and *s3*
- d) the blank space appears in the concatenation of *s1*, *s2*, and *s3*
- e) the concatenation of 10 copies of *s3*
- f) the total number of characters in the concatenation of *s1*, *s2*, and *s3*

Exercise (cont.)

String `s` is defined to be

```
'abcdefgh'
```

Write expressions using `s` and the indexing operator `[]` that return the following strings:

- a) `'a'`
- b) `'c'`
- c) `'h'`
- d) `'f'`

Exercise (cont.)

List `lst` is a list of prices for a pair of boots at different online retailers

- a) You found another retailer selling the boots for \$160.00; add this price to list `lst`
- b) Compute the number of retailers selling the boots for \$160.00
- c) Find the minimum price in `lst`
- d) Using c), find the index of the minimum price in list `lst`
- e) Using c) remove the minimum price from list `lst`
- f) Sort list `lst` in increasing order

Exercise (cont.)

Write a Python expression that assigns to variable `c`

- a) The length of the hypotenuse in a right triangle whose other two sides have lengths 3 and 4
- b) The value of the Boolean expression that evaluates whether the length of the above hypotenuse is 5
- c) The area of a disk of radius 10
- d) The value of the Boolean expression that checks whether a point with coordinates (5, 5) is inside a circle with center (0,0) and radius 7.