

Experiment:1

INTRODUCTION TO PYTHON

(Arithmetic Operators in Python)

1. Evaluate the following problems.

- Calculate $\frac{(2.5)^3 \left(16 - \frac{216}{22}\right)}{(1.7)^4 + 14} + \sqrt[4]{2050}$
- Define the variable x as $x = 2.34$, then evaluate $\frac{1}{\sqrt{14 + x^2 - x}}$
- Define the variables a, b, c and d as: $a = 13$, $b = 4.2$, $c = \frac{4b}{a}$ and $d = \frac{abc}{a+b+c}$, then evaluate $a \cdot \frac{b}{c+d} + \frac{d}{c} \frac{a}{b} - (a - b^2)(c + d)$

Solution:

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1 (a)
2 x = (pow(2.5, 3) * (16 - (216/22)) / (pow(1.7, 4) + 14)) + pow(2050, 1/4)
3 print(x)
4 (b)
5 x=2.34
6 y=1/pow((14+pow(x, 2)-x), 1/2)
7 print(y)
8 (c)
9 a=13
10 b=4.2
11 c=(4*b)/a
12 print(c)
13 d=(a*b*c)/(a+b+c)
14 print(d)
15 z=a*(b/(c+d))+((d*a)/(c*b))-(a-pow(b, 2))*(c+d)
16 print(z)
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