

## Experiment:1

### INTRODUCTION TO PYTHON

(Arithmetic Opeartors 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

$$a \cdot \frac{b}{c + d} + \frac{d a}{c b} - (a - b^2)(c + d)$$

#### Solution:

```
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)
```