Problem 1

1. Program
2. CPU
3. RAM / volatile memory
4. Byte
5. One
6. Compiler
7. Interpreter
8. Nibble

Problem 2

a) 1. 11
    2. 166

b) 1. 10001110
    2. 00000110

c) 1. 01000101
    2. 00110110

d) 1. 'n'
    2. '<'

e)

1010000	1111001	1110100	1101000	1101111	1101110
P	*y*	*t*	*h*	*o*	*n*

Problem 3

1. D
2. D
3. B
4. A
5. B
6. B

Problem 4

a.

```
 >>> type(4.2 + 3)
<class 'float'>
>>> type(4 + 3)
<class 'int'>
```

b.	Integer division in Python truncates the fraction for positive numbers, and rounds away from 0 for negative numbers.

```
>>> 5 // 2
2
>>> -5 // 2
-3
>>> 5 / 2
2.5
>>> -5 / 2
-2.5
```

Problem 5

a. `b = a + 2`

b. `a = b * 4`

c. `b = a / 3.14`

d. `a = b - 8`

Problem 6

a. 12

b. 4

c. 2.0

d. 1.6

e. 6

f. 2

g. 1

h. 0

i. 2

j. 2

k. 16