

## Assignment 1 1 - Program

```
1 #define variables i and n with particular values; data type is taken
   implicitly from form of value given
2 i = 10
3 n = 3.6875
4 #...alternatively, the following will enforce the number is definitely parsed
   as a particular type:
5 #i = int(10)
6 #n = float(3.6875)
7
8 #write both values to screen
9 print i
10 print n
```

## Assignment 1 1 - Output

```
1 10
2 3.6875
```

## Assignment 1 2 - Program

```
1 import numpy #use the library 'numpy' 'NUMerical PYthon', numerous routines
   for handling mathematics and associated topics
2
3 #define coefficients
4 a = 2.0
5 b = 3.0
6 c = 2.0
7
8 #calculate discriminant
9 discrim = b**2 - 4.0 * a * c
10
11 x_plus = (-b + numpy.sqrt(discrim))/(2.0*a)
12 x_minus = (-b - numpy.sqrt(discrim))/(2.0*a)
13
14 #write to screen
15 print 'x_plus', x_plus
16 print 'x_minus', x_minus
```

## Assignment 1 2 - Output

```
1 x_plus 0.5
2 x_minus -2.0
```

```
1 x_plus nan
2 x_minus nan
```