

The screenshot shows the PyCharm IDE interface. The left sidebar displays a project tree with files like 'B10802050課室練習11-1.py' through '11-3.py'. The main editor window is titled '準備python程式設計' and contains a Python script. The script imports NumPy and defines a 3x3 matrix A. It then performs several operations: creating a 2x2 submatrix A11, calculating A12 and A21, and creating a 3x3 matrix B. The output of these operations is printed to the console.

```
1 import numpy as np
2
3 A = np.array([[1, 4, 1, 1], [2, 2, 1, 1], [3, 3, 2, 2]])
4 print(A, "\n")
5
6 A11 = A[:2, :2]
7 A12 = A[:2, 2:]
8 A21 = A[2:, :2]
9 A22 = A[2:, 2:]
10
11 print(A11, "\n")
12 print(A12, "\n")
13 print(A21, "\n")
14 print(A22, "\n")
15
16 B = np.array([[1, 1, 1, 1], [1, 2, 1, 1], [3, 1, 1, 1], [3, 2, 1, 2]])
```

The console output shows the following results:

```
PS C:\Users\USER\Desktop\py\準備python程式設計> & C:\Users\USER\AppData\Local\Programs\Python\Python311\python.exe c:/Users/USER/Desktop/py/準備python程式設計/B10802050課室練習11-3.py
[[1 4 1 1]
 [2 2 1 1]
 [3 3 2 2]]

[[1 1]
 [2 2]]

[[1 1]
 [1 1]]

[[1 1]
 [2 2]]

[[1 1 1 1]
 [1 2 1 1]
 [3 1 1 1]
 [3 2 1 2]]

[[1 1]
 [1 2]]

[[1 1]
 [1 1]]

[[1 1]
 [3 2]]

[[1 1]
 [1 2]]
```

The status bar at the bottom indicates the file encoding is UTF-8 and the Python version is 3.11.0 64-bit.