```
 1 C:\Users\a\AppData\Local\Programs\Python\Python37-32\
   python.exe C:\Users\a\.IdeaIC2018.3\config\plugins\python-
   ce\helpers\pydev\pydevconsole.py --mode=client --port=
   52263
 2
 3 import sys; print('Python %s on %s' % (sys.version, sys.
   platform))
 4 sys.path.extend(['C:\\Users\\a\\Documents\\Project\\FFT
   ', 'C:/Users/a/Documents/Project/FFT'])
 5
 6 Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [
   MSC v.1915 32 bit (Intel)]
 7 Type 'copyright', 'credits' or 'license' for more
   information
 8 IPython 7.1.1 -- An enhanced Interactive Python. Type '?'
   for help.
 9 PyDev console: using IPython 7.1.1
10
11 Python 3.7.1 (v3.7.1:260ec2c36a, Oct 20 2018, 14:05:16) [
   MSC v.1915 32 bit (Intel)] on win32
12 In[2]: runfile('C:/Users/a/Documents/Project/FFT/
   peak_detection.py', wdir='C:/Users/a/Documents/Project/FFT
   ')
13 Backend TkAgg is interactive backend. Turning interactive
   mode on.
14 bpm atrial =  105
15 average differences atrial =  0.5699615384615384
16 sdsd atrial =  24.155164578436622
17 rmssd atrial =  0.5757304652590924
18
19 bpm atrial 2 =  85
20 average differences atrial 2 =  0.7090952380952382
21 sdsd atrial 2 =  23.840468732262234
22 rmssd atrial 2 =  0.7624397297251858
23
24 bpm atrial 3 =  69
25 average differences atrial 3 =  0.8627058823529412
26 sdsd atrial 3 =  24.314251033525878
27 rmssd atrial 3 =  0.894240561492366
28 C:\Users\a\AppData\Roaming\Python\Python37\site-packages\
   scipy\signal\_arraytools.py:45: FutureWarning: Using a non
   -tuple sequence for multidimensional indexing is
   deprecated; use `arr[tuple(seq)]` instead of `arr[seq]`.
   In the future this will be interpreted as an array index
   , `arr[np.array(seq)]`, which will result either in an
```

```
28 error or a different result.
29   b = a[a_slice]
30
31 bpm mine =  66
32 average differences mine =  0.8958823529411765
33 sdsd mine =  6.401233068032645
34 rmssd mine =  0.8984059958244565
35
36 bpm normal =  60
37 average differences normal =  0.9696180555555556
38 sdsd normal =  3.4528157411118836
39 rmssd normal =  0.9676918544204075
40
41 bpm normal 2 =  60
42 average differences normal 2 =  0.9696180555555556
43 sdsd normal 2 =  3.4528157411118836
44 rmssd normal 2 =  0.9676918544204075
45
46 bpm Hemal_1 =  66
47 average differences Hemal_1 =  0.7761964285714286
48 sdsd Hemal_1 =  22.38173182584455
49 rmssd Hemal_1 =  0.9474006446490741
50
51 bpm Hemal_2 =  87
52 average differences Hemal_2 =  0.5398888888888889
53 sdsd Hemal_2 =  26.305418631026996
54 rmssd Hemal_2 =  0.7799606043280632
55
56 bpm arrhythmia_1 =  73
57 average differences arrhythmia_1 =  0.8235725308641976
58 sdsd arrhythmia_1 =  24.10345728395105
59 rmssd arrhythmia_1 =  0.8301883113337191
60
61 bpm arrhythmia_2 =  70
62 average differences arrhythmia_2 =  0.862157809983897
63 sdsd arrhythmia_2 =  24.12766843503749
64 rmssd arrhythmia_2 =  0.8475905188667151
65
66 bpm arrhythmia_3 =  78
67 average differences arrhythmia_3 =  0.7722222222222221
68 sdsd arrhythmia_3 =  23.853422076828366
69 rmssd arrhythmia_3 =  0.777569019603349
70
71 Process finished with exit code -1
72
```