```
# -*- coding: utf-8 -*-
"""amr.ipynb

Automatically generated by Colaboratory.

Original file is located at
    https://colab.research.google.com/drive/1jYSh4Qo7Ad6o0AX2SwQAkKvVKG2L7h94
"""

#
from             import

      5  10  20  15
     8
     0 5 1 2 3
     10 50 146 347 568 750 1023 1576 2000


# Q1
for   in
    for   in
        if       10 or      1
            for   in


                                    0
              if       10
                                  'Eigenvalues' 'Density of states,D(E)' min         0   max
              if      1
                                  'Eigenvalues' 'Density of states,D(E)' min         0   max

      9  6  8  7  5

# Q2
for   in
    for   in
        if       6 or      1
            for   in
                                   10

                                    0
              if       6
                                  'Eigenvalues' 'Density of states,D(E)' min         0   max
              if      1
                                  'Eigenvalues' 'Density of states,D(E)' min         0   max


# Q3
for   in
    for   in


                          0
                       'Eigenvalues' 'Density of states,D(E)' min         0   max         0   3


#Q4
```

```
for   in
    for   in


                        0
                    'Eigenvalues' 'Density of states,D(E)' min         0   max         0   4
```