

```

1  from program2_2 import Dmatrix
2
3  ROW      = 3 # 行の要素数
4  COLUMN   = 4 # 列の要素数
5
6  def main():
7      global ROW, COLUMN
8      a = Dmatrix(1, ROW, 1, COLUMN) # 行列 a[1...ROW][1...COLUMN]
9      b = Dmatrix(1, ROW, 1, COLUMN) # 行列 b[1...ROW][1...COLUMN]
10
11     # 行列の定義
12     for i in range(1, ROW+1):
13         for j in range(1, COLUMN+1):
14             a[i][j] = 2.0 * (i + j)
15             b[i][j] = 3.0 * (i + j)
16
17     # 行列の和の計算
18     c = matrix_sum(a, b)
19
20     # 結果の表示
21     print("行列 A と行列 B の和は次の通りです")
22     for i in range(1, ROW+1):
23         for j in range(1, COLUMN+1):
24             print(c[i][j], end=" ")
25         print()
26
27
28     # 行列の和
29     # a[m1...m2][n1...n2] と b[m1...m2][n1...n2] の和を求める。
30     def matrix_sum(a: Dmatrix, b: Dmatrix):
31         m1, m2 = a.row_head_idx, a.row_last_idx
32         n1, n2 = a.col_head_idx, a.col_last_idx
33         c = Dmatrix(m1, m2, n1, n2)
34
35         for i in range(m1, m2+1):
36             for j in range(n1, n2+1):
37                 c[i][j] = a[i][j] + b[i][j]
38
39         return c
40
41
42     if __name__ == "__main__":

```