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1  /*****
2  File name: cal_mean.cpp
3  Description: calculate mean matrix
4  *****/
5
6  #include "cal_mean.h"
7
8  void cal_mean(double *meanMatrix, double **retMatrix, int numberAssets, int
numberReturns)
9  {
10     //calculate the average return
11     for(int i = 0; i < numberAssets; i++)
12     {
13         double mean = 0;
14         for(int j = 0; j < numberReturns; j++)
15             mean += retMatrix[i][j] / numberReturns;
16         meanMatrix[i] = mean;
17     }
18 }
19
20 void cal_mean(double *meanMatrix, double **retMatrix, int numberAssets, int
numberReturns, int startDay)
21 {
22     //calculate the average return from specific startDay
23     for(int i = 0; i < numberAssets; i++)
24     {
25         double mean = 0;
26         for(int j = startDay; j < startDay + numberReturns; j++)
27             mean += retMatrix[i][j] / numberReturns;
28         meanMatrix[i] = mean;
29     }
30 }
31

```