2D Array

/* Have three integer test scores for each of 100 students. Compute average for each student and average for each test. */

const int Nstudents = 100; // global constants
const int Nscores = 3;

int main () {
    int scores[Nstudents][Nscores];
    double studentAve[Nstudents], testAve[Nscores];

    readdata(scores);
    rowsum(scores, studentAve);
    colsum(scores, testAve);
    printresults(scores, testAve, studentAve);
}

void readdata(int vals[][Nscores]) {
    for (int i = 0 ; i < Nstudents ; ++i )
        for (int j = 0 ; j < Nscores; ++j )
            cin >> vals[i][j];
}
void rowsum(const int vals[][Nscores],
            double aves[])
{
   // average for each student
   double sum;

   for (int i = 0 ; i < Nstudents ; ++i ) {
      sum = 0.0; // init sum for each student
      for (int j = 0 ; j < Nscores ; ++j )
         sum += vals[i][j];
      aves[i] = sum/Nscores;
   }
}

void colsum(const int vals[][Nscores],
            double aves[])
{
   // average for each test
   double sum;

   for (int j = 0 ; j < Nscores ; ++j ) {
      sum = 0.0; // init sum for each test
      for (int i = 0 ; i < Nstudents ; ++i )
         sum += vals[i][j];
      aves[j] = sum / Nstudents;
   }
}