## **Input format**

A matrix consists of positive integers where columns are separated by tabs and rows are separated by line breaks.

## Part 1

For each row, calculate the difference between the largest value and the smallest value; the checksum is the sum of all of these differences.

For example, given the following matrix:

```
5 1 9 5
9 7 5 3
2 4 6 8
```

- The first row's largest and smallest values are 9 and 1, and their difference is 8.
- The second row's largest and smallest values are 9 and 3, and their difference is 6.
- The third row's difference is 6.
- In this example, the matrix's checksum would be 8 + 6 + 6 = 20.

## Part 2

For each row find the numbers which evenly divides another number - that is, where the result of the division operation is a whole number. Find those numbers on each row, divide them, and add up each rows's result.

For example, given the following matrix:

```
5 9 2 8
9 4 7 3
3 8 6 5
```

- In the first row, the only two numbers that evenly divide are 8 and 2; the result of this division is 4.
- In the second row, the two numbers are 9 and 3; the result is 3.
- In the third row the result is 2.

• In this example, the sum of the results would be 4 + 3 + 2 = 9.

## **Test input & output**

1208	412	743	57	1097	53	71	1029	719	133	258	69	1104
373	367	365										
4011	4316	1755	4992	228	240	3333	208	247	3319	4555	717	1483
4608	1387	3542										
675	134	106	115	204	437	1035	1142	195	1115	569	140	1133
190	701	1016										
4455	2184	5109	221	3794	246	5214	4572	3571	3395	2054	5050	216
878	237	3880										
4185	5959	292	2293	118	5603	2167	5436	3079	167	243	256	5382
207	5258	4234										
94	402	126	1293	801	1604	1481	1292	1428	1051	345	1510	1417
684	133	119										
120	1921	115	3188	82	334	366	3467	103	863	3060	2123	3429
1974	557	3090										
53	446	994	71	872	898	89	982	957	789	1040	100	133
82	84	791										
2297	733	575	2896	1470	169	2925	1901	195	2757	1627	1216	148
3037	392	221										
1343	483	67	1655	57	71	1562	447	58	1561	889	1741	1338
88	1363	560										
2387	3991	3394	6300	2281	6976	234	204	6244	854	1564	210	195
7007	3773	3623										
1523	77	1236	1277	112	171	70	1198	86	1664	1767	75	315
143	1450	1610										
168	2683	1480	200	1666	1999	3418	2177	156	430	2959	3264	2989
136	110	3526										
8702	6973	203	4401	8135	7752	1704	8890	182	9315	255	229	6539
647	6431	6178										
2290	157	2759	3771	4112	2063	153	3538	3740	130	3474	1013	180
2164	170	189										
525	1263	146	954	188	232	1019	918	268	172	1196	1091	1128
234	650	420										

• For part 1 the answer should be: 54426

• For part 2 the answer should be: 333