Ollivander's Inventory

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Problem Submissions Leaderboard Discussions

Harry Potter and his friends are at Ollivander's with Ron, finally replacing Charlie's old broken wand.

Hermione decides the best way to choose is by determining the minimum number of gold galleons needed to buy each *non-evil* wand of high power and age. Write a query to print the *id*, *age*, *coins_needed*, and *power* of the wands that Ron's interested in, sorted in order of descending *power*. If more than one wand has same power, sort the result in order of descending *age*.

Input Format

The following tables contain data on the wands in Ollivander's inventory:

- *Wands:* The *id* is the id of the wand, *code* is the code of the wand, *coins_needed* is the total number of gold galleons needed to buy the wand, and *power* denotes the quality of the wand (the higher the power, the better the wand is).

Column	Type
id	Integer
code	Integer
coins_needed	Integer
power	Integer

- *Wands_Property:* The *code* is the code of the wand, *age* is the age of the wand, and *is_evil* denotes whether the wand is good for the dark arts. If the value of *is_evil* is *0*, it means that the wand is not evil. The mapping between *code* and *age* is one-one, meaning that if there are two pairs, $(code_1, age_1)$ and $(code_2, age_2)$, then $code_1 \neq code_2$ and $age_1 \neq age_2$.

Column	Type
code	Integer
age	Integer
is_evil	Integer

Sample Input

Wands Table:

id	code	coins_needed	power
1	4	3688	8
2	3	9365	3
3	3	7187	10
4	3	734	8
5	1	6020	2
6	2	6773	7
7	3	9873	9
8	3	7721	7
9	1	1647	10
10	4	504	5
11	2	7587	5
12	5	9897	10
13	3	4651	8
14	2	5408	1
15	2	6018	7
16	4	7710	5

17	2	8798	7
18	2	3312	3
19	4	7651	6
20	5	5689	3

Wands_Property Table:

code	age	is_evil
1	45	0
2	40	0
3	4	1
4	20	0
5	17	0

Sample Output

```
9 45 1647 10
12 17 9897 10
1 20 3688 8
15 40 6018 7
19 20 7651 6
11 40 7587 5
10 20 504 5
18 40 3312 3
20 17 5689 3
5 45 6020 2
14 40 5408 1
```

Explanation

The data for wands of *age 45* (code 1):

id	age	coins_needed	power
5	45	6020	2
9	45	1647	10

- The minimum number of galleons needed for $wand(age = 45, power = 2) = 6020$
- The minimum number of galleons needed for $wand(age = 45, power = 10) = 1647$

The data for wands of *age 40* (code 2):

id	age	coins_needed	power
14	40	5408	1
18	40	3312	3
11	40	7587	5
15	40	6018	7
17	40	8798	7
6	40	6773	7

- The minimum number of galleons needed for $wand(age = 40, power = 1) = 5408$
- The minimum number of galleons needed for $wand(age = 40, power = 3) = 3312$
- The minimum number of galleons needed for $wand(age = 40, power = 5) = 7587$
- The minimum number of galleons needed for $wand(age = 40, power = 7) = 6018$

The data for wands of *age 20* (code 4):

id	age	coins_needed	power
10	20	504	5
16	20	7710	5
19	20	7651	6
1	20	3688	8

- The minimum number of galleons needed for $wand(age = 20, power = 5) = 504$
- The minimum number of galleons needed for $wand(age = 20, power = 6) = 7651$
- The minimum number of galleons needed for $wand(age = 20, power = 8) = 3688$

The data for wands of *age 17* (code 5):

id	age	coins_needed	power
20	17	5689	3
12	17	9897	10

- The minimum number of galleons needed for $wand(age = 17, power = 3) = 5689$
- The minimum number of galleons needed for $wand(age = 17, power = 10) = 9897$

Submissions: 4795
Max Score: 30
Difficulty: Medium

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Current Buffer (saved locally, editable) MySQL

```
1
2 select w.id, p.age, w.coins_needed, w.power
3 from Wands as w join Wands_Property as p on (w.code = p.code)
4 where p.is_evil = 0 and w.coins_needed = (select min(coins_needed) from Wands as w1 join Wands_Property as p1 on (w1.code =
  p1.code) where w1.power = w.power and p1.age = p.age) order by w.power desc, p.age desc;
```

Line: 4 Col: 213

Upload Code as File Run Code Submit Code

Testcase 0 ✔

Congratulations, you passed the sample test case.
Click the **Submit Code** button to run your code against all the test cases.

Your Output (stdout)

```
1038 496 4789 10
1130 494 9439 10
1315 492 4126 10
9 491 7345 10
858 483 4352 10
1164 481 9831 10
1288 464 4952 10
861 462 8302 10
412 455 5625 10
996 451 8884 10
1608 446 8351 10
1376 443 1735 10
1330 430 5182 10
1633 425 2206 10
1197 419 3468 10
441 416 2508 10
424 413 997 10
1298 397 3810 10
1125 395 2299 10
333 393 926 10
363 388 4477 10
785 380 1712 10
1578 376 9886 10
455 375 2759 10
238 374 2016 10
421 367 4392 10
346 349 1909 10
874 348 7212 10
483 344 8855 10
1485 340 741 10
1583 339 3867 10
983 337 851 10
185 335 618 10
1325 318 520 10
1938 311 2726 10
1121 310 6498 10
```

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1773 308 3489 10
999 301 7322 10
1456 286 6221 10
405 284 1187 10
1903 283 5954 10
114 279 7915 10
525 278 3247 10
707 275 8110 10
1040 271 4993 10
1655 264 2027 10
266 263 2106 10
1520 259 2533 10
426 255 9950 10
1214 254 3927 10
1161 240 4875 10
470 235 1794 10
383 229 918 10
708 222 941 10
564 219 4073 10
1709 211 6749 10
988 209 1775 10
1846 208 529 10
1854 206 4798 10
668 205 1985 10
720 199 601 10
579 189 2951 10
1369 181 6762 10
608 177 7538 10
1723 176 619 10
447 172 4329 10
993 171 2922 10
365 168 4144 10
466 158 5958 10
1434 494 683 9
519 487 6652 9
1184 483 7376 9
582 481 615 9
1556 466 6648 9
1430 464 9556 9
834 455 557 9
644 446 5487 9
260 438 5182 9
189 434 5486 9
1687 430 1188 9
458 416 9740 9
494 414 5869 9
367 413 8763 9
451 398 1581 9
1500 395 7326 9
277 389 2097 9
1472 386 4466 9
373 381 8547 9
1032 380 917 9
896 376 4113 9
1626 375 9862 9
607 374 3734 9
926 367 792 9
1347 364 6443 9
1031 353 6876 9
1869 349 2140 9
101 348 3200 9
1323 345 868 9
919 340 643 9
1570 337 9490 9
679 335 2992 9
1183 310 1738 9
647 308 3172 9
472 306 2022 9
965 297 4329 9
1098 292 5141 9
1300 290 4041 9
719 279 5192 9
1327 278 715 9
1872 275 6149 9
1753 271 4826 9
1810 264 2868 9
1116 263 5321 9
1781 255 7991 9
110 254 5558 9
839 249 3362 9
1555 247 739 9
461 243 6003 9
1720 240 9556 9
520 233 2584 9
882 229 3085 9
1772 219 1780 9
416 211 7726 9
1400 209 1568 9
54 208 1507 9
111 205 7125 9
452 202 2760 9
1035 199 703 9
1114 178 8085 9
162 176 4929 9
201 168 4174 9
1649 164 8391 9
1177 158 5001 9
1852 496 1645 8
246 494 828 8
1231 491 4540 8
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209 481 543 8
1196 466 7501 8
1345 464 4883 8
975 451 3790 8
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1653 432 5529 8
1247 430 1850 8
491 419 842 8
1368 416 1031 8
1811 414 4931 8
1282 413 5423 8
1589 398 522 8
689 397 7834 8
1719 395 6039 8
894 393 1745 8
1058 389 3607 8
1498 388 7509 8
35 386 1867 8
991 382 1542 8
264 381 4813 8
1669 380 623 8
995 376 954 8
1885 375 3919 8
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1129 367 1066 8
1477 361 9542 8
1076 353 3811 8
468 349 3038 8
1022 348 6984 8
1270 345 5833 8
569 344 2476 8
987 343 6764 8
1754 339 6855 8
1829 335 1070 8
1117 311 856 8
415 310 526 8
826 308 845 8
817 306 9243 8
202 301 2302 8
1796 297 4564 8
549 292 4835 8
420 290 1197 8
605 286 5054 8
1338 284 7372 8
803 283 4465 8
587 279 3628 8
155 275 2753 8
1537 271 9418 8
1015 264 1696 8
1008 263 7567 8
1402 259 607 8
288 254 6100 8
1420 247 7116 8
436 243 745 8
1340 240 846 8
384 235 1736 8
872 229 824 8
1273 211 9890 8
471 209 704 8
1471 208 3534 8
776 206 7913 8
1457 205 4010 8
1449 202 2450 8
1213 199 2826 8
1567 189 4655 8
963 178 5633 8
1025 177 1024 8
71 172 2245 8
81 496 6908 7
985 494 2401 7
808 491 2129 7
1651 487 1973 7
1232 483 1281 7
398 481 1990 7
1190 466 8050 7
235 464 4357 7
1397 455 3546 7
118 451 6046 7
705 450 6692 7
1828 446 6322 7
1798 443 738 7
1862 438 1473 7
827 434 6585 7
1795 425 7474 7
1851 416 3716 7
696 414 2546 7
1289 413 931 7
1375 395 890 7
492 389 7926 7
1052 388 667 7
1648 382 1719 7
1744 381 6740 7
651 376 586 7
850 375 7312 7
267 374 745 7
1191 367 3425 7
1091 361 3969 7
1812 349 6582 7
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523 348 7208 7
804 345 5730 7
542 344 717 7
1971 343 2529 7
667 340 2996 7
46 337 764 7
387 335 7171 7
1859 329 1634 7
1392 320 8898 7
351 318 856 7
1667 311 3537 7
1242 306 5838 7
1192 301 909 7
1972 297 644 7
311 292 6740 7
63 290 7761 7
1496 286 699 7
1794 284 7729 7
875 283 4077 7
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1881 275 7430 7
1442 272 2285 7
1747 271 849 7
842 264 2847 7
1312 263 5432 7
278 259 9600 7
225 254 8004 7
1175 247 9064 7
915 243 2728 7
1357 240 624 7
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140 222 1076 7
1271 219 3105 7
546 211 2060 7
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1084 206 2417 7
1533 205 2578 7
1636 202 4176 7
1877 189 2481 7
1274 178 4168 7
42 177 5708 7
319 172 8013 7
122 168 2180 7
1067 164 5529 7
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574 487 7369 6
275 481 9573 6
670 466 9009 6
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41 443 3049 6
198 438 4913 6
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801 419 3959 6
435 416 1898 6
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710 264 2555 3
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693 235 2811 3
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1236 483 556 2
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1778 466 1306 2
1646 464 6785 2
1848 455 4746 2
390 451 602 2
192 450 9708 2
487 446 1722 2
38 443 2750 2
551 438 3185 2
994 430 7359 2
1860 425 2856 2
596 416 2266 2
167 414 3144 2
1284 413 4648 2
70 398 9359 2
716 397 3277 2
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683 389 6896 2
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1957 380 9673 2
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1964 374 4722 2
15 364 1099 2
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1235 353 2522 2
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1930 164 3480 2
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738 491 2123 1
753 487 5687 1
900 483 622 1
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146 443 5967 1
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648 432 4981 1
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632 419 526 1
450 414 4686 1
715 413 2917 1
10 398 1771 1
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1012 386 2369 1
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802 380 8936 1
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659 375 923 1
104 374 1523 1
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887 353 1456 1
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1962 337 555 1
1684 335 5414 1
1818 329 3352 1
556 320 2299 1
112 318 819 1
1201 311 1945 1
1612 310 2438 1
89 308 899 1
1416 301 2701 1
936 297 557 1
508 292 9241 1
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642 286 799 1
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341 278 7105 1
172 275 2550 1
639 272 4995 1
1256 271 9518 1
691 264 5833 1
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176 255 8916 1
153 254 3961 1
998 249 1832 1
244 247 3286 1
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1126 206 7659 1
1640 205 978 1
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597 189 868 1
457 177 6612 1
1945 176 653 1
1157 172 7476 1
517 168 604 1
775 158 1684 1
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