1. We will need a list of all staff members, including their first and last names, email addresses, and the store identification number where they work.

mysql> select staff\_id, first\_name, last\_name, email, store\_id from staff;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| staff\_id | first\_name | Last\_name | email | Store\_id |
| 1 | Mike | Hillyer | Mike.Hillyer@sakilastaff.com | 1 |
| 2 | Jon | Stephens | Jon.Stephens@sakilastaff.com | 2 |

2 rows in set (0.00 sec)

1. We will need separate counts of inventory items held at each of your two stores.

mysql> **select store\_id, count(\*) “Inventory Count” from inventory group by store\_id;**

|  |  |
| --- | --- |
| store\_id | Inventory Count |
| 1 | 2270 |
| 2 | 2371 |

2 rows in set (0.00 sec)

1. We will need separate counts of inventory items held at each of your two stores.

mysql> **select store\_id, count(\*) as totCustomers from customer where active = 1 group by store\_id;**

|  |  |
| --- | --- |
| store\_id | totCustomers |
| 1 | 318 |
| 2 | 266 |

2 rows in set (0.00 sec)

1. In order to assess the liability of a data breach, we will need you to provide a count of all customer email addresses stored in the database.

**mysql> select count(\*) From customer where email <> '';**

|  |
| --- |
| Count(\*) |
| 599 |

1 row in set (0.00 sec)

1. We are interested in how diverse your film offering is as a means of understanding how likely you are to keep customers engaged in the future. Please provide a count of unique film titles you have in inventory at each store and then provide a count of the unique categories of films you provide.

**mysql> select store\_id, count(distinct title) from film join inventory on inventory.film\_id = film.film\_id group by store\_id;**

|  |  |
| --- | --- |
| store\_id | totCustomers |
| 1 | 759 |
| 2 | 762 |

2 rows in set (0.00 sec)

mysql> select category\_id, count(distinct film\_id) filmCount from film\_category group by category\_id order by category\_id;

|  |  |
| --- | --- |
| category\_id | filmCount |
| 1 | 64 |
| 2 | 66 |
| 3 | 60 |
| 4 | 57 |
| 5 | 58 |
| 6 | 68 |
| 7 | 62 |
| 8 | 69 |
| 9 | 73 |
| 10 | 61 |
| 11 | 56 |
| 12 | 51 |
| 13 | 63 |
| 14 | 61 |
| 15 | 74 |
| 16 | 57 |

16 rows in set (0.00 sec)

1. We would like to understand the replacement cost of your films. Please provide the replacement cost for the film that is least expensive to replace, the most expensive to replace, and the average of all films you carry.

**mysql> select**

**-> min(replacement\_cost) MinReplaceCost,**

**-> max(replacement\_cost) MaxReplaceCost, avg(replacement\_cost) AvgReplaceCost**

**-> from film ;**

|  |  |  |
| --- | --- | --- |
| **MinReplaceCost** | **MaxReplaceCost** | **AvgReplaceCost** |
| 9.99 | 29.99 | 19.9840000 |

**1 row in set (0.02 sec)**

1. We are interested in having you put payment monitoring systems and maximum payment processing restrictions in place in order to minimize the future risk of fraud by your staff. Please provide the average payment you process, as well as the maximum payment you have processed.

**mysql> select avg(amount), max(amount) from payment;**

|  |  |
| --- | --- |
| Avg(amount) | Max(amount) |
| 4.20667 | 11.99 |

**1 row in set (0.01 sec)**

1. We would like to better understand what your customer base looks like. Please provide a list of all customer identification values, with a count of rentals they have made all-time, with your highest volume customers at the top of the list.

**mysql> select customer\_id, count(rental\_id) from payment group by customer\_id order by count(rental\_id) desc;**

|  |  |
| --- | --- |
| Customer\_id | Count(rentalid) |
| 148 | 46 |
| 526 | 45 |
| 236 | 42 |
| 144 | 42 |
| 75 | 41 |
| 469 | 40 |
| 197 | 40 |
| 137 | 39 |
| 468 | 39 |
| 178 | 39 |
| 5 | 38 |
| 459 | 38 |
| 295 | 38 |
| 410 | 38 |
| 257 | 37 |
| 366 | 37 |
| 176 | 37 |
| 198 | 37 |
| 439 | 36 |
| 29 | 36 |
| 380 | 36 |
| 354 | 36 |
| 348 | 36 |
| 267 | 36 |
| 506 | 35 |
| 21 | 35 |
| 50 | 35 |
| 273 | 35 |
| 91 | 35 |
| 368 | 35 |
| 373 | 35 |
| 381 | 35 |
| 274 | 35 |
| 204 | 35 |
| 403 | 35 |
| 271 | 35 |
| 196 | 35 |
| 26 | 34 |
| 30 | 34 |
| 38 | 34 |
| 46 | 34 |
| 66 | 34 |
| 239 | 34 |
| 360 | 34 |
| 576 | 34 |
| 372 | 34 |
| 502 | 34 |
| 119 | 34 |
| 566 | 34 |
| 129 | 34 |
| 138 | 34 |
| 207 | 34 |
| 147 | 34 |
| 473 | 34 |
| 241 | 34 |
| 168 | 34 |
| 181 | 34 |
| 211 | 34 |
| 438 | 33 |
| 7 | 33 |
| 390 | 33 |
| 51 | 33 |
| 64 | 33 |
| 237 | 33 |
| 451 | 33 |
| 84 | 33 |
| 86 | 33 |
| 230 | 33 |
| 297 | 33 |
| 102 | 33 |
| 533 | 33 |
| 114 | 33 |
| 522 | 33 |
| 454 | 33 |
| 172 | 33 |
| 462 | 33 |
| 314 | 33 |
| 1 | 32 |
| 306 | 32 |
| 532 | 32 |
| 15 | 32 |
| 452 | 32 |
| 244 | 432 |
| 254 | 32 |
| 520 | 32 |
| 28 | 32 |
| 569 | 32 |
| 35 | 32 |
| 259 | 32 |
| 406 | 32 |
| 242 | 32 |
| 503 | 32 |
| 329 | 32 |
| 209 | 32 |
| 277 | 32 |
| 470 | 32 |
| 245 | 32 |
| 89 | 32 |
| 535 | 32 |
| 262 | 32 |
| 120 | 32 |
| 122 | 32 |
| 125 | 32 |
| 550 | 32 |
| 128 | 32 |
| 141 | 32 |
| 342 | 32 |
| 158 | 32 |
| 167 | 32 |
| 346 | 32 |
| 405 | 32 |
| 442 | 32 |
| 393 | 31 |
| 279 | 31 |
| 27 | 31 |
| 416 | 31 |
| 251 | 31 |
| 446 | 31 |
| 361 | 31 |
| 323 | 31 |
| 78 | 31 |
| 340 | 31 |
| 260 | 31 |
| 513 | 31 |
| 103 | 31 |
| 293 | 31 |
| 300 | 31 |
| 157 | 31 |
| 210 | 31 |
| 479 | 31 |
| 494 | 31 |
| 186 | 31 |
| 309 | 31 |
| 214 | 31 |
| 499 | 30 |
| 275 | 30 |
| 256 | 30 |
| 436 | 30 |
| 20 | 30 |
| 23 | 30 |
| 336 | 30 |
| 42 | 30 |
| 418 | 30 |
| 53 | 30 |
| 56 | 30 |
| 444 | 30 |
| 296 | 30 |
| 71 | 30 |
| 72 | 30 |
| 80 | 30 |
| 87 | 30 |
| 560 | 30 |
| 339 | 30 |
| 404 | 30 |
| 287 | 30 |
| 107 | 30 |
| 108 | 30 |
| 112 | 30 |
| 115 | 30 |
| 131 | 30 |
| 388 | 30 |
| 135 | 30 |
| 391 | 30 |
| 334 | 30 |
| 584 | 30 |
| 595 | 30 |
| 299 | 30 |
| 154 | 30 |
| 408 | 30 |
| 161 | 30 |
| 472 | 30 |
| 347 | 30 |
| 307 | 30 |
| 356 | 30 |
| 484 | 30 |
| 424 | 30 |
| 269 | 30 |
| 319 | 30 |
| 337 | 29 |
| 25 | 29 |
| 39 | 29 |
| 349 | 29 |
| 52 | 29 |
| 54 | 29 |
| 529 | 29 |
| 481 | 29 |
| 316 | 29 |
| 287 | 29 |
| 113 | 29 |
| 447 | 29 |
| 253 | 29 |
| 363 | 29 |
| 302 | 29 |
| 163 | 29 |
| 173 | 29 |
| 482 | 29 |
| 179 | 29 |
| 253 | 29 |
| 363 | 29 |
| 302 | 29 |
| 163 | 29 |
| 173 | 29 |
| 482 | 29 |
| 179 | 29 |
| 203 | 29 |
| 265 | 29 |
| 268 | 29 |
| 302 | 29 |
| 287 | 29 |
| 6 | 28 |
| 500 | 28 |
| 12 | 28 |
| 14 | 28 |
| 16 | 28 |
| 332 | 28 |
| 49 | 28 |
| 57 | 28 |
| 374 | 28 |
| 77 | 28 |
| 376 | 28 |
| 461 | 28 |
| 90 | 28 |
| 92 | 28 |
| 338 | 28 |
| 497 | 28 |
| 589 | 28 |
| 400 | 28 |
| 126 | 28 |
| 132 | 28 |
| 145 | 28 |
| 457 | 28 |
| 166 | 28 |
| 559 | 28 |
| 558 | 28 |
| 187 | 28 |
| 322 | 28 |
| 574 | 28 |
| 213 | 28 |
| 317 | 28 |
| 221 | 28 |
| 596 | 28 |
| 441 | 28 |
| 262 | 28 |
| 515 | 28 |
| 266 | 28 |
| 276 | 28 |
| 504 | 28 |
| 283 | 28 |
| 284 | 28 |
| 290 | 28 |
| 2 | 27 |
| 13 | 27 |
| 36 | 27 |
| 421 | 27 |
| 40 | 27 |
| 45 | 27 |
| 58 | 27 |
| 59 | 27 |
| 498 | 27 |
| 74 | 27 |
| 580 | 27 |
| 561 | 27 |
| 96 | 27 |
| 434 | 27 |
| 116 | 27 |
| 133 | 27 |
| 591 | 27 |
| 139 | 27 |
| 151 | 27 |
| 160 | 27 |
| 383 | 27 |
| 426 | 27 |
| 471 | 27 |
| 190 | 27 |
| 579 | 27 |
| 200 | 27 |
| 206 | 27 |
| 577 | 27 |
| 396 | 27 |
| 581 | 27 |
| 220 | 27 |
| 228 | 27 |
| 491 | 27 |
| 594 | 27 |
| 407 | 27 |
| 331 | 27 |
| 280 | 27 |
| 282 | 27 |
| 286 | 27 |
| 292 | 27 |
| 333 | 27 |
| 31 | 26 |
| 303 | 26 |
| 121 | 26 |
| 240 | 26 |
| 261 | 26 |
| 278 | 26 |
| 285 | 26 |
| 294 | 26 |
| 298 | 26 |
| 303 | 26 |
| 304 | 26 |
| 312 | 26 |
| 327 | 26 |
| 357 | 26 |
| 377 | 26 |
| 385 | 26 |
| 387 | 26 |
| 389 | 26 |
| 411 | 26 |
| 422 | 26 |
| 423 | 26 |
| 425 | 26 |
| 445 | 26 |
| 450 | 26 |
| 486 | 26 |
| 495 | 26 |
| 510 | 26 |
| 512 | 26 |
| 516 | 26 |
| 518 | 26 |
| 551 | 26 |
| 570 | 26 |
| 587 | 26 |
| 593 | 26 |
| 10 | 25 |
| 24 | 25 |
| 41 | 25 |
| 60 | 25 |
| 63 | 25 |
| 69 | 25 |
| 83 | 25 |
| 98 | 25 |
| 150 | 25 |
| 155 | 25 |
| 156 | 25 |
| 188 | 25 |
| 193 | 25 |
| 199 | 25 |
| 201 | 25 |
| 229 | 25 |
| 232 | 25 |
| 235 | 25 |
| 264 | 25 |
| 270 | 25 |
| 305 | 25 |
| 308 | 25 |
| 324 | 25 |
| 326 | 25 |
| 330 | 25 |
| 343 | 25 |
| 359 | 25 |
| 369 | 25 |
| 384 | 25 |
| 414 | 25 |
| 417 | 25 |
| 419 | 25 |
| 433 | 25 |
| 435 | 25 |
| 456 | 25 |
| 460 | 25 |
| 463 | 25 |
| 507 | 25 |
| 508 | 25 |
| 517 | 25 |
| 528 | 25 |
| 531 | 25 |
| 536 | 25 |
| 537 | 25 |
| 546 | 25 |
| 562 | 25 |
| 572 | 25 |
| 582 | 25 |
| 590 | 25 |
| 597 | 25 |
| 8 | 24 |
| 11 | 24 |
| 19 | 24 |
| 34 | 24 |
| 43 | 24 |
| 73 | 24 |
| 99 | 24 |
| 100 | 24 |
| 101 | 24 |
| 104 | 24 |
| 123 | 24 |
| 127 | 24 |
| 130 | 24 |
| 153 | 24 |
| 175 | 24 |
| 227 | 24 |
| 243 | 24 |
| 258 | 24 |
| 288 | 24 |
| 351 | 24 |
| 375 | 24 |
| 382 | 24 |
| 427 | 24 |
| 455 | 24 |
| 475 | 24 |
| 490 | 24 |
| 511 | 24 |
| 527 | 24 |
| 534 | 24 |
| 540 | 24 |
| 541 | 24 |
| 553 | 24 |
| 557 | 24 |
| 564 | 24 |
| 574 | 24 |
| 585 | 24 |
| 9 | 23 |
| 37 | 23 |
| 62 | 23 |
| 76 | 23 |
| 85 | 23 |
| 93 | 23 |
| 106 | 23 |
| 134 | 23 |
| 177 | 23 |
| 180 | 23 |
| 183 | 23 |
| 184 | 23 |
| 185 | 23 |
| 192 | 23 |
| 216 | 23 |
| 217 | 23 |
| 233 | 23 |
| 246 | 23 |
| 249 | 23 |
| 299 | 23 |
| 311 | 23 |
| 313 | 23 |
| 328 | 23 |
| 335 | 23 |
| 341 | 23 |
| 350 | 23 |
| 352 | 23 |
| 364 | 23 |
| 365 | 23 |
| 379 | 23 |
| 392 | 23 |
| 409 | 23 |
| 415 | 23 |
| 431 | 23 |
| 432 | 23 |
| 437 | 23 |
| 453 | 23 |
| 466 | 23 |
| 493 | 23 |
| 519 | 23 |
| 521 | 23 |
| 530 | 23 |
| 547 | 23 |
| 583 | 23 |
| 4 | 22 |
| 18 | 22 |
| 22 | 22 |
| 47 | 22 |
| 55 | 22 |
| 65 | 22 |
| 67 | 22 |
| 68 | 22 |
| 79 | 22 |
| 81 | 22 |
| 143 | 22 |
| 169 | 22 |
| 189 | 22 |
| 224 | 22 |
| 247 | 22 |
| 252 | 22 |
| 321 | 22 |
| 325 | 22 |
| 367 | 22 |
| 394 | 22 |
| 430 | 22 |
| 440 | 22 |
| 443 | 22 |
| 476 | 22 |
| 477 | 22 |
| 480 | 22 |
| 488 | 22 |
| 514 | 22 |
| 523 | 22 |
| 539 | 22 |
| 543 | 22 |
| 544 | 22 |
| 554 | 22 |
| 578 | 22 |
| 598 | 22 |
| 17 | 21 |
| 33 | 21 |
| 88 | 21 |
| 94 | 21 |
| 118 | 21 |
| 152 | 21 |
| 159 | 21 |
| 165 | 21 |
| 174 | 21 |
| 222 | 21 |
| 226 | 21 |
| 238 | 21 |
| 301 | 21 |
| 358 | 21 |
| 399 | 21 |
| 401 | 21 |
| 412 | 21 |
| 413 | 21 |
| 420 | 21 |
| 429 | 21 |
| 489 | 21 |
| 496 | 21 |
| 501 | 21 |
| 505 | 21 |
| 545 | 21 |
| 552 | 21 |
| 556 | 21 |
| 568 | 21 |
| 162 | 20 |
| 191 | 20 |
| 203 | 20 |
| 212 | 20 |
| 250 | 20 |
| 272 | 20 |
| 310 | 20 |
| 320 | 20 |
| 355 | 20 |
| 402 | 20 |
| 428 | 20 |
| 449 | 20 |
| 509 | 20 |
| 549 | 20 |
| 567 | 20 |
| 117 | 19 |
| 195 | 19 |
| 370 | 19 |
| 378 | 19 |
| 395 | 19 |
| 458 | 19 |
| 478 | 19 |
| 524 | 19 |
| 548 | 19 |
| 586 | 19 |
| 599 | 19 |
| 70 | 18 |
| 95 | 18 |
| 97 | 18 |
| 124 | 18 |
| 140 | 18 |
| 194 | 18 |
| 205 | 18 |
| 218 | 18 |
| 255 | 18 |
| 271 | 18 |
| 344 | 18 |
| 353 | 18 |
| 483 | 18 |
| 542 | 18 |
| 48 | 17 |
| 223 | 17 |
| 315 | 17 |
| 465 | 17 |
| 555 | 17 |
| 164 | 16 |
| 398 | 16 |
| 464 | 16 |
| 492 | 16 |
| 136 | 15 |
| 248 | 15 |
| 61 | 14 |
| 110 | 14 |
| 281 | 14 |
| 318 | 12 |

**599 rows in set (0.02 sec)**

**599 rows in set (0.02 sec)**