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2019-07-05 17:23:33,135 : INFO : EPOCH 2 - PROGRESS: at 92.46% examples, 1863 words/s,
in asize 8, out asize 0
2019-07-05 17:23:35,509 : INFO : EPOCH 2 - PROGRESS: at 92.49% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:23:39,039 : INFO : EPOCH 2 - PROGRESS: at 92.51% examples, 1863 words/s,
in gsize 8, out gsize 0
2019-07-05 17:23:46,616 : INFO : EPOCH 2 - PROGRESS: at 92.53% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:23:48,069 : INFO : EPOCH 2 - PROGRESS: at 92.55% examples, 1863 words/s,
in_qsize 7, out qsize 0
2019-07-05 17:23:50,521 : INFO : EPOCH 2 - PROGRESS: at 92.57% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:23:54,270 : INFO : EPOCH 2 - PROGRESS: at 92.58% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:24:02,724 : INFO : EPOCH 2 - PROGRESS: at 92.62% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:24:04,239 : INFO : EPOCH 2 - PROGRESS: at 92.64% examples, 1862 words/s,
in_qsize 8, out_qsize 0
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in qsize 7, out qsize 0
2019-07-05 17:24:09,475 : INFO : EPOCH 2 - PROGRESS: at 92.69% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:24:18,710 : INFO : EPOCH 2 - PROGRESS: at 92.72% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:24:20,350 : INFO : EPOCH 2 - PROGRESS: at 92.74% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:24:24,225 : INFO : EPOCH 2 - PROGRESS: at 92.77% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:24:34,587 : INFO : EPOCH 2 - PROGRESS: at 92.80% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:24:36,555 : INFO : EPOCH 2 - PROGRESS: at 92.85% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:24:39,322 : INFO : EPOCH 2 - PROGRESS: at 92.87% examples, 1863 words/s,
in_qsize 7, out_qsize 0
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in qsize 8, out qsize 0
2019-07-05 17:24:52,056 : INFO : EPOCH 2 - PROGRESS: at 92.93% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:24:54,633 : INFO : EPOCH 2 - PROGRESS: at 92.95% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:25:05,601 : INFO : EPOCH 2 - PROGRESS: at 92.97% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:25:08,197 : INFO : EPOCH 2 - PROGRESS: at 93.02% examples, 1863 words/s,
in gsize 7, out gsize 0
2019-07-05 17:25:09,853 : INFO : EPOCH 2 - PROGRESS: at 93.04% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:25:20,792 : INFO : EPOCH 2 - PROGRESS: at 93.06% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:25:22,214 : INFO : EPOCH 2 - PROGRESS: at 93.08% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:25:24,166 : INFO : EPOCH 2 - PROGRESS: at 93.11% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:25:35,917 : INFO : EPOCH 2 - PROGRESS: at 93.15% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:25:38,213 : INFO : EPOCH 2 - PROGRESS: at 93.17% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:25:40,369 : INFO : EPOCH 2 - PROGRESS: at 93.22% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:25:51,087 : INFO : EPOCH 2 - PROGRESS: at 93.24% examples, 1862 words/s,
```

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in qsize 7, out qsize 0
2019-07-05 17:25:54,527 : INFO : EPOCH 2 - PROGRESS: at 93.27% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:25:56,573 : INFO : EPOCH 2 - PROGRESS: at 93.32% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:26:06,182 : INFO : EPOCH 2 - PROGRESS: at 93.36% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:26:09,588 : INFO : EPOCH 2 - PROGRESS: at 93.38% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:26:12,259 : INFO : EPOCH 2 - PROGRESS: at 93.42% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:26:21,432 : INFO : EPOCH 2 - PROGRESS: at 93.45% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:26:24,634 : INFO : EPOCH 2 - PROGRESS: at 93.49% examples, 1862 words/s,
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in_qsize 7, out_qsize 0
2019-07-05 17:26:28,198 : INFO : EPOCH 2 - PROGRESS: at 93.55% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:26:36,290 : INFO : EPOCH 2 - PROGRESS: at 93.58% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:26:39,605 : INFO : EPOCH 2 - PROGRESS: at 93.60% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:26:42,042 : INFO : EPOCH 2 - PROGRESS: at 93.62% examples, 1863 words/s,
in asize 7, out asize 0
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in qsize 7, out qsize 0
2019-07-05 17:26:51,511 : INFO : EPOCH 2 - PROGRESS: at 93.67% examples, 1862 words/s,
in gsize 7, out gsize 0
2019-07-05 17:26:54,370 : INFO : EPOCH 2 - PROGRESS: at 93.69% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:26:58,166 : INFO : EPOCH 2 - PROGRESS: at 93.72% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:27:00,384 : INFO : EPOCH 2 - PROGRESS: at 93.74% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:27:06,808 : INFO : EPOCH 2 - PROGRESS: at 93.77% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:27:09,558 : INFO : EPOCH 2 - PROGRESS: at 93.80% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:27:14,510 : INFO : EPOCH 2 - PROGRESS: at 93.82% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:27:16,259 : INFO : EPOCH 2 - PROGRESS: at 93.85% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:27:21,775 : INFO : EPOCH 2 - PROGRESS: at 93.87% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:27:24,667 : INFO : EPOCH 2 - PROGRESS: at 93.90% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:27:30,806 : INFO : EPOCH 2 - PROGRESS: at 93.93% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:27:32,493 : INFO : EPOCH 2 - PROGRESS: at 93.95% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:27:37,213 : INFO : EPOCH 2 - PROGRESS: at 93.97% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:27:39,947 : INFO : EPOCH 2 - PROGRESS: at 94.00% examples, 1863 words/s,
in qsize 8, out qsize 0
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in_qsize 7, out_qsize 0
2019-07-05 17:27:49,138 : INFO : EPOCH 2 - PROGRESS: at 94.05% examples, 1862 words/s,
in qsize 7, out qsize 0
```

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2019-07-05 17:27:52,434 : INFO : EPOCH 2 - PROGRESS: at 94.07% examples, 1862 words/s,
in asize 7, out asize 0
2019-07-05 17:27:55,324 : INFO : EPOCH 2 - PROGRESS: at 94.11% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:28:03,153 : INFO : EPOCH 2 - PROGRESS: at 94.13% examples, 1862 words/s,
in gsize 8, out gsize 0
2019-07-05 17:28:05,293 : INFO : EPOCH 2 - PROGRESS: at 94.16% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:28:07,668 : INFO : EPOCH 2 - PROGRESS: at 94.19% examples, 1863 words/s,
in_qsize 8, out qsize 0
2019-07-05 17:28:10,433 : INFO : EPOCH 2 - PROGRESS: at 94.21% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:19,034 : INFO : EPOCH 2 - PROGRESS: at 94.23% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:28:20,909 : INFO : EPOCH 2 - PROGRESS: at 94.26% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:28:22,767 : INFO : EPOCH 2 - PROGRESS: at 94.28% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:28:25,925 : INFO : EPOCH 2 - PROGRESS: at 94.30% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:35,209 : INFO : EPOCH 2 - PROGRESS: at 94.33% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:36,458 : INFO : EPOCH 2 - PROGRESS: at 94.35% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:37,552 : INFO : EPOCH 2 - PROGRESS: at 94.38% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:40,866 : INFO : EPOCH 2 - PROGRESS: at 94.40% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:28:51,165 : INFO : EPOCH 2 - PROGRESS: at 94.44% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:28:52,258 : INFO : EPOCH 2 - PROGRESS: at 94.46% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:28:55,931 : INFO : EPOCH 2 - PROGRESS: at 94.50% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:29:07,151 : INFO : EPOCH 2 - PROGRESS: at 94.52% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:29:08,744 : INFO : EPOCH 2 - PROGRESS: at 94.57% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:29:11,228 : INFO : EPOCH 2 - PROGRESS: at 94.60% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:29:22,243 : INFO : EPOCH 2 - PROGRESS: at 94.62% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:29:23,598 : INFO : EPOCH 2 - PROGRESS: at 94.64% examples, 1862 words/s,
in gsize 8, out gsize 0
2019-07-05 17:29:26,332 : INFO : EPOCH 2 - PROGRESS: at 94.68% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:29:37,378 : INFO : EPOCH 2 - PROGRESS: at 94.70% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:29:39,864 : INFO : EPOCH 2 - PROGRESS: at 94.74% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:29:41,582 : INFO : EPOCH 2 - PROGRESS: at 94.78% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:29:52,522 : INFO : EPOCH 2 - PROGRESS: at 94.81% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:29:55,992 : INFO : EPOCH 2 - PROGRESS: at 94.84% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:30:07,587 : INFO : EPOCH 2 - PROGRESS: at 94.91% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:11,307 : INFO : EPOCH 2 - PROGRESS: at 94.93% examples, 1862 words/s,
```

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in qsize 7, out qsize 0
2019-07-05 17:30:12,651 : INFO : EPOCH 2 - PROGRESS: at 94.99% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:22,682 : INFO : EPOCH 2 - PROGRESS: at 95.01% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:26,868 : INFO : EPOCH 2 - PROGRESS: at 95.04% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:30:28,465 : INFO : EPOCH 2 - PROGRESS: at 95.09% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:37,784 : INFO : EPOCH 2 - PROGRESS: at 95.12% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:30:41,455 : INFO : EPOCH 2 - PROGRESS: at 95.14% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:43,238 : INFO : EPOCH 2 - PROGRESS: at 95.17% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:30:44,472 : INFO : EPOCH 2 - PROGRESS: at 95.20% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:30:53,033 : INFO : EPOCH 2 - PROGRESS: at 95.24% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:30:56,485 : INFO : EPOCH 2 - PROGRESS: at 95.26% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:30:59,112 : INFO : EPOCH 2 - PROGRESS: at 95.28% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:31:00,268 : INFO : EPOCH 2 - PROGRESS: at 95.30% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:31:08,065 : INFO : EPOCH 2 - PROGRESS: at 95.32% examples, 1862 words/s,
in qsize 7, out qsize 0
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in asize 8, out asize 0
2019-07-05 17:31:15,302 : INFO : EPOCH 2 - PROGRESS: at 95.38% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:31:16,536 : INFO : EPOCH 2 - PROGRESS: at 95.41% examples, 1863 words/s,
in_qsize 7, out_qsize 0
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in_qsize 7, out_qsize 0
2019-07-05 17:31:27,022 : INFO : EPOCH 2 - PROGRESS: at 95.48% examples, 1862 words/s,
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2019-07-05 17:31:32,648 : INFO : EPOCH 2 - PROGRESS: at 95.52% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:31:38,323 : INFO : EPOCH 2 - PROGRESS: at 95.54% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:31:42,072 : INFO : EPOCH 2 - PROGRESS: at 95.56% examples, 1862 words/s,
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2019-07-05 17:31:47,344 : INFO : EPOCH 2 - PROGRESS: at 95.59% examples, 1862 words/s,
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2019-07-05 17:31:48,878 : INFO : EPOCH 2 - PROGRESS: at 95.62% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:31:53,330 : INFO : EPOCH 2 - PROGRESS: at 95.63% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:31:57,095 : INFO : EPOCH 2 - PROGRESS: at 95.67% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:32:03,471 : INFO : EPOCH 2 - PROGRESS: at 95.69% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:04,720 : INFO : EPOCH 2 - PROGRESS: at 95.71% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:08,347 : INFO : EPOCH 2 - PROGRESS: at 95.73% examples, 1863 words/s,
in qsize 7, out qsize 0
```

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2019-07-05 17:32:11,908 : INFO : EPOCH 2 - PROGRESS: at 95.75% examples, 1863 words/s,
in asize 7, out asize 0
2019-07-05 17:32:19,458 : INFO : EPOCH 2 - PROGRESS: at 95.77% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:32:20,786 : INFO : EPOCH 2 - PROGRESS: at 95.79% examples, 1862 words/s,
in gsize 7, out gsize 0
2019-07-05 17:32:23,051 : INFO : EPOCH 2 - PROGRESS: at 95.82% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:32:27,239 : INFO : EPOCH 2 - PROGRESS: at 95.84% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:35,661 : INFO : EPOCH 2 - PROGRESS: at 95.86% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:36,676 : INFO : EPOCH 2 - PROGRESS: at 95.89% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:38,365 : INFO : EPOCH 2 - PROGRESS: at 95.90% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:32:42,489 : INFO : EPOCH 2 - PROGRESS: at 95.93% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:32:51,725 : INFO : EPOCH 2 - PROGRESS: at 95.95% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:53,293 : INFO : EPOCH 2 - PROGRESS: at 96.01% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:32:57,449 : INFO : EPOCH 2 - PROGRESS: at 96.03% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:33:07,368 : INFO : EPOCH 2 - PROGRESS: at 96.05% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:33:12,744 : INFO : EPOCH 2 - PROGRESS: at 96.12% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:33:23,041 : INFO : EPOCH 2 - PROGRESS: at 96.14% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:33:27,760 : INFO : EPOCH 2 - PROGRESS: at 96.20% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:33:38,198 : INFO : EPOCH 2 - PROGRESS: at 96.23% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:33:39,385 : INFO : EPOCH 2 - PROGRESS: at 96.26% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:33:42,697 : INFO : EPOCH 2 - PROGRESS: at 96.32% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:33:53,309 : INFO : EPOCH 2 - PROGRESS: at 96.35% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:33:55,140 : INFO : EPOCH 2 - PROGRESS: at 96.39% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:33:57,671 : INFO : EPOCH 2 - PROGRESS: at 96.44% examples, 1863 words/s,
in gsize 7, out gsize 0
2019-07-05 17:34:08,534 : INFO : EPOCH 2 - PROGRESS: at 96.46% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:34:10,627 : INFO : EPOCH 2 - PROGRESS: at 96.49% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:34:11,924 : INFO : EPOCH 2 - PROGRESS: at 96.51% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:34:23,530 : INFO : EPOCH 2 - PROGRESS: at 96.55% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:34:26,123 : INFO : EPOCH 2 - PROGRESS: at 96.56% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:34:27,389 : INFO : EPOCH 2 - PROGRESS: at 96.58% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:34:38,814 : INFO : EPOCH 2 - PROGRESS: at 96.63% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:34:41,923 : INFO : EPOCH 2 - PROGRESS: at 96.65% examples, 1862 words/s,
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in qsize 7, out qsize 0
2019-07-05 17:34:42,939 : INFO : EPOCH 2 - PROGRESS: at 96.69% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:34:53,597 : INFO : EPOCH 2 - PROGRESS: at 96.75% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:34:57,658 : INFO : EPOCH 2 - PROGRESS: at 96.77% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:34:59,472 : INFO : EPOCH 2 - PROGRESS: at 96.82% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:35:08,238 : INFO : EPOCH 2 - PROGRESS: at 96.84% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:35:13,349 : INFO : EPOCH 2 - PROGRESS: at 96.87% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:35:15,462 : INFO : EPOCH 2 - PROGRESS: at 96.92% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:35:23,382 : INFO : EPOCH 2 - PROGRESS: at 96.94% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:35:28,697 : INFO : EPOCH 2 - PROGRESS: at 96.97% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:35:31,166 : INFO : EPOCH 2 - PROGRESS: at 97.02% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:35:37,979 : INFO : EPOCH 2 - PROGRESS: at 97.05% examples, 1862 words/s,
in qsize 8, out qsize 0
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in qsize 7, out qsize 0
2019-07-05 17:35:45,008 : INFO : EPOCH 2 - PROGRESS: at 97.09% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:35:53,212 : INFO : EPOCH 2 - PROGRESS: at 97.13% examples, 1862 words/s,
in asize 8, out asize 0
2019-07-05 17:35:58,929 : INFO : EPOCH 2 - PROGRESS: at 97.17% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:36:00,897 : INFO : EPOCH 2 - PROGRESS: at 97.21% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:36:08,132 : INFO : EPOCH 2 - PROGRESS: at 97.26% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:36:14,024 : INFO : EPOCH 2 - PROGRESS: at 97.29% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:36:16,586 : INFO : EPOCH 2 - PROGRESS: at 97.32% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:36:17,648 : INFO : EPOCH 2 - PROGRESS: at 97.35% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:36:23,459 : INFO : EPOCH 2 - PROGRESS: at 97.38% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:36:29,307 : INFO : EPOCH 2 - PROGRESS: at 97.40% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:36:32,431 : INFO : EPOCH 2 - PROGRESS: at 97.41% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:36:38,369 : INFO : EPOCH 2 - PROGRESS: at 97.46% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:36:44,136 : INFO : EPOCH 2 - PROGRESS: at 97.48% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:36:48,244 : INFO : EPOCH 2 - PROGRESS: at 97.50% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:36:53,134 : INFO : EPOCH 2 - PROGRESS: at 97.55% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:36:59,151 : INFO : EPOCH 2 - PROGRESS: at 97.57% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:37:03,525 : INFO : EPOCH 2 - PROGRESS: at 97.59% examples, 1862 words/s,
in qsize 7, out qsize 0
```

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2019-07-05 17:37:07,821 : INFO : EPOCH 2 - PROGRESS: at 97.62% examples, 1863 words/s,
in asize 7, out asize 0
2019-07-05 17:37:13,775 : INFO : EPOCH 2 - PROGRESS: at 97.64% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:37:19,323 : INFO : EPOCH 2 - PROGRESS: at 97.66% examples, 1862 words/s,
in gsize 7, out gsize 0
2019-07-05 17:37:23,087 : INFO : EPOCH 2 - PROGRESS: at 97.72% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:37:29,182 : INFO : EPOCH 2 - PROGRESS: at 97.75% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:37:35,886 : INFO : EPOCH 2 - PROGRESS: at 97.78% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:37:38,416 : INFO : EPOCH 2 - PROGRESS: at 97.84% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:37:44,403 : INFO : EPOCH 2 - PROGRESS: at 97.87% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:37:51,604 : INFO : EPOCH 2 - PROGRESS: at 97.89% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:37:53,432 : INFO : EPOCH 2 - PROGRESS: at 97.95% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:37:59,588 : INFO : EPOCH 2 - PROGRESS: at 97.97% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:38:07,979 : INFO : EPOCH 2 - PROGRESS: at 97.99% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:38:14,727 : INFO : EPOCH 2 - PROGRESS: at 98.06% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:38:23,509 : INFO : EPOCH 2 - PROGRESS: at 98.08% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:38:29,963 : INFO : EPOCH 2 - PROGRESS: at 98.15% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:38:38,697 : INFO : EPOCH 2 - PROGRESS: at 98.17% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:38:39,744 : INFO : EPOCH 2 - PROGRESS: at 98.22% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:38:44,651 : INFO : EPOCH 2 - PROGRESS: at 98.26% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:38:53,807 : INFO : EPOCH 2 - PROGRESS: at 98.28% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:38:55,760 : INFO : EPOCH 2 - PROGRESS: at 98.31% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:38:59,402 : INFO : EPOCH 2 - PROGRESS: at 98.35% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:39:08,948 : INFO : EPOCH 2 - PROGRESS: at 98.37% examples, 1862 words/s,
in gsize 7, out gsize 0
2019-07-05 17:39:11,963 : INFO : EPOCH 2 - PROGRESS: at 98.41% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:14,619 : INFO : EPOCH 2 - PROGRESS: at 98.45% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:24,245 : INFO : EPOCH 2 - PROGRESS: at 98.49% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:27,791 : INFO : EPOCH 2 - PROGRESS: at 98.51% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:39:29,683 : INFO : EPOCH 2 - PROGRESS: at 98.56% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:39,308 : INFO : EPOCH 2 - PROGRESS: at 98.59% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:39:42,901 : INFO : EPOCH 2 - PROGRESS: at 98.60% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:44,166 : INFO : EPOCH 2 - PROGRESS: at 98.64% examples, 1863 words/s,
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in qsize 7, out qsize 0
2019-07-05 17:39:45,213 : INFO : EPOCH 2 - PROGRESS: at 98.66% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:39:54,604 : INFO : EPOCH 2 - PROGRESS: at 98.69% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:39:58,801 : INFO : EPOCH 2 - PROGRESS: at 98.72% examples, 1862 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:40:00,338 : INFO : EPOCH 2 - PROGRESS: at 98.75% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:09,901 : INFO : EPOCH 2 - PROGRESS: at 98.81% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:40:14,244 : INFO : EPOCH 2 - PROGRESS: at 98.83% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:15,915 : INFO : EPOCH 2 - PROGRESS: at 98.87% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:40:24,964 : INFO : EPOCH 2 - PROGRESS: at 98.92% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:30,260 : INFO : EPOCH 2 - PROGRESS: at 98.94% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:40:32,260 : INFO : EPOCH 2 - PROGRESS: at 98.99% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:39,508 : INFO : EPOCH 2 - PROGRESS: at 99.00% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:46,165 : INFO : EPOCH 2 - PROGRESS: at 99.02% examples, 1862 words/s,
in asize 7, out asize 0
2019-07-05 17:40:48,367 : INFO : EPOCH 2 - PROGRESS: at 99.08% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:40:54,885 : INFO : EPOCH 2 - PROGRESS: at 99.10% examples, 1862 words/s,
in gsize 8, out gsize 0
2019-07-05 17:41:01,211 : INFO : EPOCH 2 - PROGRESS: at 99.13% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:41:02,555 : INFO : EPOCH 2 - PROGRESS: at 99.16% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:41:04,791 : INFO : EPOCH 2 - PROGRESS: at 99.17% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:41:10,276 : INFO : EPOCH 2 - PROGRESS: at 99.20% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:41:16,276 : INFO : EPOCH 2 - PROGRESS: at 99.23% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:18,776 : INFO : EPOCH 2 - PROGRESS: at 99.25% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:20,447 : INFO : EPOCH 2 - PROGRESS: at 99.28% examples, 1863 words/s,
in_qsize 8, out_qsize 0
2019-07-05 17:41:25,636 : INFO : EPOCH 2 - PROGRESS: at 99.30% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:31,587 : INFO : EPOCH 2 - PROGRESS: at 99.34% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:34,621 : INFO : EPOCH 2 - PROGRESS: at 99.35% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:36,605 : INFO : EPOCH 2 - PROGRESS: at 99.37% examples, 1863 words/s,
in qsize 8, out qsize 0
2019-07-05 17:41:40,370 : INFO : EPOCH 2 - PROGRESS: at 99.40% examples, 1863 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:41:47,025 : INFO : EPOCH 2 - PROGRESS: at 99.42% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:41:50,807 : INFO : EPOCH 2 - PROGRESS: at 99.44% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:41:52,182 : INFO : EPOCH 2 - PROGRESS: at 99.47% examples, 1863 words/s,
in qsize 7, out qsize 0
```

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2019-07-05 17:41:53,557 : INFO : EPOCH 2 - PROGRESS: at 99.50% examples, 1863 words/s,
in asize 8, out asize 0
2019-07-05 17:42:02,650 : INFO : EPOCH 2 - PROGRESS: at 99.52% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:42:06,118 : INFO : EPOCH 2 - PROGRESS: at 99.54% examples, 1862 words/s,
in gsize 8, out gsize 0
2019-07-05 17:42:07,649 : INFO : EPOCH 2 - PROGRESS: at 99.56% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:42:17,735 : INFO : EPOCH 2 - PROGRESS: at 99.62% examples, 1862 words/s,
in_qsize 7, out qsize 0
2019-07-05 17:42:21,792 : INFO : EPOCH 2 - PROGRESS: at 99.65% examples, 1862 words/s,
in qsize 8, out qsize 0
2019-07-05 17:42:23,494 : INFO : EPOCH 2 - PROGRESS: at 99.67% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:42:32,760 : INFO : EPOCH 2 - PROGRESS: at 99.74% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:42:37,946 : INFO : EPOCH 2 - PROGRESS: at 99.76% examples, 1862 words/s,
in_qsize 7, out_qsize 0
2019-07-05 17:42:39,651 : INFO : EPOCH 2 - PROGRESS: at 99.81% examples, 1863 words/s,
in qsize 7, out qsize 0
2019-07-05 17:42:47,605 : INFO : EPOCH 2 - PROGRESS: at 99.84% examples, 1862 words/s,
in qsize 7, out qsize 0
2019-07-05 17:42:52,916 : INFO : EPOCH 2 - PROGRESS: at 99.86% examples, 1862 words/s,
in qsize 6, out qsize 0
2019-07-05 17:42:55,446 : INFO : EPOCH 2 - PROGRESS: at 99.91% examples, 1863 words/s,
in qsize 4, out qsize 0
2019-07-05 17:43:03,041 : INFO : EPOCH 2 - PROGRESS: at 99.93% examples, 1862 words/s,
in qsize 3, out qsize 1
2019-07-05 17:43:03,041 : INFO : worker thread finished; awaiting finish of 3 more threads
2019-07-05 17:43:03,962 : INFO : worker thread finished; awaiting finish of 2 more threads
2019-07-05 17:43:05,449 : INFO : EPOCH 2 - PROGRESS: at 99.98% examples, 1863 words/s,
in qsize 1, out qsize 1
2019-07-05 17:43:05,449 : INFO : worker thread finished; awaiting finish of 1 more threads
2019-07-05 17:43:05,823 : INFO : worker thread finished; awaiting finish of 0 more threads
2019-07-05 17:43:05,823 : INFO : EPOCH - 2 : training on 41519358 raw words (30346517
effective words) took 16287.1s, 1863 effective words/s
2019-07-05 17:43:05,823 : INFO : training on a 83038716 raw words (60693884 effective words)
took 32594.8s, 1862 effective words/s
2019-07-05 17:43:05,823 : INFO : precomputing L2-norms of word weight vectors
Out[1]: 0.8223567
In [2]: model.save("Word2VectorGensim.model")
2019-07-06 14:46:44,757 : INFO : saving Word2Vec object under Word2VectorGensim.model,
separately None
2019-07-06 14:46:44,758 : INFO : storing np array 'vectors' to
Word2VectorGensim.model.wv.vectors.npy
2019-07-06 14:46:45,115 : INFO : not storing attribute vectors norm
2019-07-06 14:46:45,118 : INFO : storing np array 'syn1neg' to
Word2VectorGensim.model.trainables.syn1neg.npv
2019-07-06 14:46:45,397 : INFO : not storing attribute cum table
C:\Users\admin\Anaconda3\lib\site-packages\smart open\smart open lib.py:398: UserWarning:
This function is deprecated, use smart open.open instead. See the migration notes for
details: https://github.com/RaRe-Technologies/smart_open/blob/master/README.rst#migrating-
to-the-new-open-function
  'See the migration notes for details: %s' % MIGRATION NOTES URL
2019-07-06 14:46:45,641 : INFO : saved Word2VectorGensim.model
In [3]: modelSaved = gensim.models.Word2Vec.load("Word2VectorGensim.model")
2019-07-06 14:48:32,496 : INFO : loading Word2Vec object from Word2VectorGensim.model
```

```
C:\Users\admin\Anaconda3\lib\site-packages\smart open\smart open lib.py:398: UserWarning:
This function is deprecated, use smart open.open instead. See the migration notes for
details: https://github.com/RaRe-Technologies/smart open/blob/master/README.rst#migrating-
to-the-new-open-function
  'See the migration notes for details: %s' % MIGRATION NOTES URL
2019-07-06 14:48:32,587 : INFO : loading wv recursively from Word2VectorGensim.model.wv.*
with mmap=None
2019-07-06 14:48:32,588 : INFO : loading vectors from Word2VectorGensim.model.wv.vectors.npy
with mmap=None
2019-07-06 14:48:32,609 : INFO : setting ignored attribute vectors_norm to None
2019-07-06 14:48:32,610 : INFO : loading vocabulary recursively from
Word2VectorGensim.model.vocabulary.* with mmap=None
2019-07-06 14:48:32,611 : INFO : loading trainables recursively from
Word2VectorGensim.model.trainables.* with mmap=None
2019-07-06 14:48:32,612 : INFO : loading syn1neg from
Word2VectorGensim.model.trainables.syn1neg.npy with mmap=None
2019-07-06 14:48:32,631 : INFO : setting ignored attribute cum table to None
2019-07-06 14:48:32,632 : INFO : loaded Word2VectorGensim.model
In [4]: modelSaved.wv.most similar(positive=w1)
2019-07-06 14:48:56,422 : INFO : precomputing L2-norms of word weight vectors
Out[4]:
[('amazed', 0.8097079992294312),
 ('horrified', 0.7990546226501465),
 ('appalled', 0.7788991928100586),
 ('astonished', 0.7728351354598999),
 ('suprised', 0.7402072548866272),
 ('stunned', 0.7359300851821899),
 ('dismayed', 0.7343570590019226),
 ('surprized', 0.7142817974090576),
 ('astounded', 0.7011071443557739),
 ('surprised', 0.6921557188034058)]
In [5]: model.wv.most similar(positive=w1)
Out[5]:
[('amazed', 0.8097079992294312),
 ('horrified', 0.7990546226501465),
 ('appalled', 0.7788991928100586),
 ('astonished', 0.7728351354598999),
 ('suprised', 0.7402072548866272),
 ('stunned', 0.7359300851821899),
 ('dismayed', 0.7343570590019226),
 ('surprized', 0.7142817974090576),
 ('astounded', 0.7011071443557739),
 ('surprised', 0.6921557188034058)]
In [6]: w1=["summer"]
   ...: model.wv.most similar(positive=w1,topn=6)
Out[6]:
[('winter', 0.8099874258041382),
 ('heatwave', 0.6428799629211426),
 ('autumn', 0.6162552833557129),
 ('weather', 0.5872957706451416),
 ('spell', 0.5677729845046997),
 ('summertime', 0.5629850029945374)]
In [7]: modelSaved.wv.most similar(positive=w1,topn=6)
Out[7]:
[('winter', 0.8099874258041382),
```

```
('heatwave', 0.6428799629211426),
 ('autumn', 0.6162552833557129),
 ('weather', 0.5872957706451416),
 ('spell', 0.5677729845046997),
 ('summertime', 0.5629850029945374)]
In [8]: w1=["shocked"]
   ...: model.wv.most similar(positive=w1,topn=6)
Out[8]:
[('amazed', 0.8097079992294312),
 ('horrified', 0.7990546226501465),
 ('appalled', 0.7788991928100586),
 ('astonished', 0.7728351354598999),
 ('suprised', 0.7402072548866272),
 ('stunned', 0.7359300851821899)]
In [9]: model.wv.similarity(w1="dirty",w2="smelly")
Out[9]: 0.74355805
In [10]: model.wv.similarity(w1="dirty",w2="dirty")
Out[10]: 1.0
In [11]: model.wv.similarity(w1="dirty",w2="unclean")
Out[11]: 0.8223567
In [12]: from keras.models import Sequential
    ...: from keras.layers import Convolution2D
    ...: from keras.layers import MaxPooling2D
    ...: from keras.layers import Flatten
    ...: from keras.layers import Dense
Using TensorFlow backend.
In [13]: classifier = Sequential()
WARNING: Logging before flag parsing goes to stderr.
W0706 15:05:48.899093 7840 deprecation_wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:74: The name tf.get default graph is
deprecated. Please use tf.compat.v1.get default graph instead.
In [14]: classifier.add(Convolution2D(32, 3, 3, input shape = (64, 64, 3), activation =
'relu'))
 main :1: UserWarning: Update your `Conv2D` call to the Keras 2 API: `Conv2D(32, (3, 3),
input_shape=(64, 64, 3..., activation="relu")`
W0706 15:05:53.368708 7840 deprecation wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:517: The name tf.placeholder is
deprecated. Please use tf.compat.v1.placeholder instead.
W0706 15:05:53.477296 7840 deprecation wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:4138: The name tf.random uniform is
deprecated. Please use tf.random.uniform instead.
In [15]: classifier.add(MaxPooling2D(pool size = (2, 2)))
W0706 15:05:55.923875 7840 deprecation wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:3976: The name tf.nn.max pool is
deprecated. Please use tf.nn.max_pool2d instead.
In [16]: classifier.add(Convolution2D(32, 3, 3, activation = 'relu'))
```

```
...: classifier.add(MaxPooling2D(pool size = (2, 2)))
 main :1: UserWarning: Update your `Conv2D` call to the Keras 2 API: `Conv2D(32, (3, 3),
activation="relu")`
In [17]: classifier.add(Flatten())
In [18]: classifier.add(Dense(output dim = 128, activation = 'relu'))
    ...: classifier.add(Dense(output dim = 1, activation = 'sigmoid'))
 main__:1: UserWarning: Update your `Dense` call to the Keras 2 API:
Dense(activation="relu", units=128)`
 _main__:2: UserWarning: Update your `Dense` call to the Keras 2 API:
`Dense(activation="sigmoid", units=1)`
In [19]: classifier.compile(optimizer = 'adam', loss = 'binary_crossentropy', metrics =
['accuracy'])
W0706 15:06:10.470226 7840 deprecation_wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\optimizers.py:790: The name tf.train.Optimizer is deprecated. Please
use tf.compat.v1.train.Optimizer instead.
W0706 15:06:10.486186 7840 deprecation wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:3376: The name tf.log is deprecated.
Please use tf.math.log instead.
W0706 15:06:10.514463 7840 deprecation.py:323] From C:\Users\admin\Anaconda3\lib\site-
packages\tensorflow\python\ops\nn impl.py:180: add dispatch support.<locals>.wrapper (from
tensorflow.python.ops.array ops) is deprecated and will be removed in a future version.
Instructions for updating:
Use tf.where in 2.0, which has the same broadcast rule as np.where
In [20]: from keras.preprocessing.image import ImageDataGenerator
    ...: train datagen = ImageDataGenerator(rescale = 1./255,
    ...:
                                            shear range = 0.2,
                                            zoom range = 0.2,
    . . . :
                                            horizontal flip = True)
    . . . :
In [21]: test datagen = ImageDataGenerator(rescale = 1./255)
In [22]: training_set = train_datagen.flow_from_directory('dataset/training_set',
                                                           target size = (64, 64),
    . . . :
    ...:
                                                           batch size = 32,
                                                           class mode = 'binary')
    . . . :
Traceback (most recent call last):
  File "<ipython-input-22-111f853ab8e9>", line 4, in <module>
    class mode = 'binary')
  File "C:\Users\admin\Anaconda3\lib\site-packages\keras preprocessing\image
\image_data_generator.py", line 540, in flow_from_directory
    interpolation=interpolation
  File "C:\Users\admin\Anaconda3\lib\site-packages\keras preprocessing\image
\directory_iterator.py", line 106, in __init_
    for subdir in sorted(os.listdir(directory)):
FileNotFoundError: [WinError 3] The system cannot find the path specified: 'dataset/
training set'
```

```
In [23]:
In [23]: training_set = train_datagen.flow_from_directory('dataset/training_set',
                                                    target size = (64, 64),
                                                   batch size = 32,
   . . . :
                                                   class mode = 'binary')
   . . . :
Found 8000 images belonging to 2 classes.
In [24]: test set = test datagen.flow from directory('dataset/test set',
                                               target size = (64, 64),
   . . . :
   ...:
                                               batch size = 32,
                                               class mode = 'binary')
Found 2000 images belonging to 2 classes.
In [25]: classifier.fit_generator(training_set,
                              samples per epoch = 8000,
   ...:
                              nb epoch = 25,
   . . . :
   ...:
                              validation data = test set,
                              nb val samples = 2000)
 main :5: UserWarning: The semantics of the Keras 2 argument `steps per epoch` is not the
same as the Keras 1 argument `samples per epoch`. `steps per epoch` is the number of batches
to draw from the generator at each epoch. Basically steps per epoch = samples per epoch/
batch size. Similarly `nb val samples` -> `validation steps` and `val samples` -> `steps`
arguments have changed. Update your method calls accordingly.
 _main__:5: UserWarning: Update your `fit_generator` call to the Keras 2 API:
validation steps=2000)`
W0706 15:07:00.385374 7840 deprecation_wrapper.py:119] From C:\Users\admin\Anaconda3\lib
\site-packages\keras\backend\tensorflow backend.py:986: The name tf.assign add is
deprecated. Please use tf.compat.v1.assign add instead.
Epoch 1/25
250/250 [============ ] - 216s 862ms/step - loss: 0.6874 - acc: 0.5426 -
val loss: 0.6662 - val acc: 0.6181
Epoch 2/25
250/250 [========== ] - 179s 715ms/step - loss: 0.6424 - acc: 0.6250 -
val_loss: 0.5837 - val_acc: 0.7024
Epoch 3/25
250/250 [============ ] - 206s 824ms/step - loss: 0.5837 - acc: 0.6914 -
val loss: 0.5446 - val acc: 0.7337
Epoch 4/25
250/250 [=========== ] - 181s 723ms/step - loss: 0.5415 - acc: 0.7262 -
val loss: 0.5332 - val acc: 0.7349
Epoch 5/25
250/250 [======== ] - 174s 695ms/step - loss: 0.5188 - acc: 0.7431 -
val loss: 0.5001 - val acc: 0.7731
Epoch 6/25
val loss: 0.4952 - val acc: 0.7665
Epoch 7/25
250/250 [============= ] - 174s 696ms/step - loss: 0.4762 - acc: 0.7716 -
val_loss: 0.5191 - val_acc: 0.7570
Epoch 8/25
250/250 [============ ] - 174s 696ms/step - loss: 0.4598 - acc: 0.7792 -
val_loss: 0.4861 - val_acc: 0.7731
Epoch 9/25
250/250 [=========== ] - 174s 695ms/step - loss: 0.4401 - acc: 0.7884 -
val loss: 0.5473 - val acc: 0.7524
Epoch 10/25
```

```
250/250 [======== ] - 174s 696ms/step - loss: 0.4275 - acc: 0.7962 -
val loss: 0.5008 - val acc: 0.7660
Epoch 11/25
250/250 [=========== ] - 174s 695ms/step - loss: 0.4151 - acc: 0.8044 -
val loss: 0.4643 - val acc: 0.7987
Epoch 12/25
250/250 [=========== ] - 174s 695ms/step - loss: 0.3969 - acc: 0.8137 -
val loss: 0.5048 - val acc: 0.7829
Epoch 13/25
250/250 [============ ] - 174s 694ms/step - loss: 0.3893 - acc: 0.8206 -
val loss: 0.4751 - val acc: 0.7795
Epoch 14/25
250/250 [=========== ] - 174s 695ms/step - loss: 0.3590 - acc: 0.8389 -
val loss: 0.4872 - val acc: 0.7860
Epoch 15/25
250/250 [============ ] - 174s 694ms/step - loss: 0.3548 - acc: 0.8425 -
val loss: 0.4609 - val acc: 0.7981
Epoch 16/25
250/250 [=========== ] - 174s 696ms/step - loss: 0.3330 - acc: 0.8534 -
val loss: 0.4775 - val acc: 0.7970
Epoch 17/25
250/250 [======== ] - 174s 696ms/step - loss: 0.3135 - acc: 0.8611 -
val loss: 0.4673 - val acc: 0.8024
Epoch 18/25
250/250 [======== ] - 174s 694ms/step - loss: 0.3058 - acc: 0.8674 -
val loss: 0.4757 - val acc: 0.8100
Epoch 19/25
250/250 [============ ] - 173s 693ms/step - loss: 0.2984 - acc: 0.8741 -
val loss: 0.4773 - val acc: 0.8091
Epoch 20/25
250/250 [=========== ] - 173s 694ms/step - loss: 0.2770 - acc: 0.8809 -
val loss: 0.5279 - val acc: 0.7900
Epoch 21/25
250/250 [=========== ] - 174s 694ms/step - loss: 0.2640 - acc: 0.8889 -
val loss: 0.5004 - val acc: 0.7979
Epoch 22/25
250/250 [============ ] - 174s 695ms/step - loss: 0.2471 - acc: 0.8961 -
val_loss: 0.5799 - val_acc: 0.7872
Epoch 23/25
250/250 [============ ] - 174s 696ms/step - loss: 0.2381 - acc: 0.9017 -
val loss: 0.5292 - val acc: 0.7976
Epoch 24/25
250/250 [=========== ] - 174s 696ms/step - loss: 0.2231 - acc: 0.9065 -
val loss: 0.5058 - val acc: 0.8090
Epoch 25/25
250/250 [=========== ] - 174s 694ms/step - loss: 0.2201 - acc: 0.9080 -
val loss: 0.5177 - val acc: 0.8056
Out[25]: <keras.callbacks.History at 0x2e0c78707b8>
In [26]: import pickle
   ...: pickle.dump(classifier, open(r'CNNFullmodel.pkl','wb'))
In [27]: import pickle
   ...: pickle.dump(classifier, open(r'CNNFullmodel.pkl','wb'))
In [28]:
```