# پیمایش گراف با الگوریتم های BFS و DFS

حسین حمزه زاده دانشگاه تبریز بهار ۱۴۰۳

## Test 1:

Start node	Target node	BFS path	DFS path
3	8	3 -> 2 -> 6 -> 7 ->	3 -> 2 -> 1 -> 4 ->
		1 -> 5 -> 9 -> 10 ->	8
		4 -> 8	
3	7	3 -> 2 -> 6 -> 7	3 -> 2 -> 1 -> 4 ->
			8 -> 5 -> 9 -> 10 ->
			6 -> 7
1	4	1 -> 2 -> 4	1 -> 2 -> 3 -> 7 ->
			10 -> 6 -> 9 -> 8 ->
			4
1	8	1 -> 2 -> 4 -> 5 ->	1 -> 2 -> 3 -> 7 ->
		3 -> 6 -> 9 -> 8	10 -> 6 -> 9 -> 8
4	7	4 -> 1 -> 5 -> 8 ->	4 -> 1 -> 2 -> 3 ->
		2 -> 6 -> 9 -> 3 ->	7
		7	

#### Test 2:

Start node	Target node	BFS path	DFS path
1	6	1 -> 2 -> 17 -> 18 -	1 -> 2 -> 3 -> 4 -> 5
		> 497 -> 498 ->	-> 6
		513 -> 514 -> 3 ->	
		19 -> 499 -> 515 -	
		> 33 -> 34 -> 529 -	
		> 530 -> 35 -> 531	
		-> 4 -> 20 -> 500 -	
		> 516 -> 36 -> 532	
		-> 49 -> 50 -> 545	
		-> 546 -> 51 ->	
		547 -> 52 -> 548 -	
		> 5 -> 21 -> 501 ->	
		517 -> 37 -> 533 -	
		> 53 -> 549 -> 65 -	

		> 66 -> 561 -> 562	
		-> 67 -> 563 -> 68	
		-> 564 -> 69 ->	
		565 -> 6	
524	250	524 -> 11 -> 12 ->	524 -> 11 -> 10 -> 9
324	250	13 -> 27 -> 28 ->	-> 8 -> 7 -> 6 -> 5 ->
		29 -> 43 -> 44 ->	
		45 -> 507 -> 508 -	4 -> 3 -> 2 -> 1 -> 17 -> 33 -> 49 -> 65 ->
		> 509 -> 523 ->	81 -> 97 -> 113 ->
			129 -> 145 -> 161 ->
		525 -> 539 -> 540	
		-> 541 -> 10 -> 26	177 -> 193 -> 209 ->
		-> 506 -> 522 ->	225 -> 241 -> 257 ->
		14 -> 30 -> 510 -> 526 -> 42 -> 538 -	273 -> 289 -> 305 ->
		> 46 -> 542 -> 58 -	321 -> 337 -> 353 -> 369 -> 385 -> 401 ->
		> 59 -> 60 -> 554 -	417 -> 433 -> 449 ->
		> 555 -> 556 -> 61	465 -> 481 -> 482 ->
		-> 557 -> 62 ->	465 -> 461 -> 462 -> 467 -> 451 -> 435 ->
		-> 557 -> 62 -> 558 -> 9 -> 25 ->	419 -> 403 -> 387 ->
		505 -> 9 -> 25 ->	371 -> 355 -> 339 ->
		> 537 -> 15 -> 31 -	323 -> 307 -> 291 ->
		> 511 -> 527 -> 47	275 -> 259 -> 243 ->
		-> 543 -> 57 ->	227 -> 211 -> 195 ->
		553 -> 63 -> 559 -	179 -> 163 -> 147 ->
		> 73 -> 74 -> 75 ->	131 -> 115 -> 99 ->
		569 -> 570 -> 571	83 -> 67 -> 51 -> 35
		-> 76 -> 572 -> 77	-> 36 -> 37 -> 38 ->
		-> 70 -> 372 -> 77 -> 573 -> 78 ->	39 -> 40 -> 41 -> 42
		574 -> 79 -> 575 -	-> 59 -> 60 -> 61 ->
		> 8 -> 24 -> 504 ->	46 -> 30 -> 14 -> 15
		520 -> 40 -> 536 -	-> 16 -> 32 -> 48 ->
		> 56 -> 552 -> 16 -	64 -> 79 -> 94 -> 93
		> 32 -> 512 -> 528	-> 92 -> 91 -> 90 ->
		-> 48 -> 544 -> 64	73 -> 72 -> 71 -> 70
		-> 560 -> 72 ->	-> 69 -> 85 -> 101 ->
		568 -> 80 -> 576 -	117 -> 133 -> 149 ->
		> 88 -> 89 -> 90 ->	165 -> 181 -> 197 ->
		584 -> 585 -> 586	213 -> 229 -> 245 ->
		-> 91 -> 587 -> 92	261 -> 277 -> 293 ->
		-> 588 -> 93 ->	309 -> 325 -> 341 ->
		589 -> 94 -> 590 -	357 -> 373 -> 389 ->
		> 95 -> 591 -> 96 -	405 -> 421 -> 437 ->
		> 592 -> 7 -> 23 ->	453 -> 469 -> 485 ->
		503 -> 519 -> 39 -	486 -> 471 -> 455 ->
		> 535 -> 55 -> 551	439 -> 423 -> 407 ->
		-> 71 -> 567 -> 87	391 -> 375 -> 359 ->
		-> 71 -> 307 -> 67 -> 583 -> 103 ->	343 -> 327 -> 311 ->
		104 -> 105 -> 599	295 -> 279 -> 263 ->
		-> 600 -> 601 ->	247 -> 231 -> 215 ->
		106 -> 602 -> 107	199 -> 183 -> 167 ->
		100 -/ 002 -/ 107	199 -/ 103 -/ 101 -/

-> 603 -> 108 -> 151 -> 135 -> 119 -> 604 -> 109 -> 605 103 -> 104 -> 121 -> -> 110 -> 606 -> 122 -> 123 -> 124 -> 111 -> 607 -> 112 -125 -> 126 -> 127 -> > 608 -> 6 -> 22 -> 112 -> 128 -> 144 -> 502 -> 518 -> 38 -159 -> 158 -> 157 -> > 534 -> 54 -> 550 156 -> 155 -> 154 -> -> 70 -> 566 -> 86 153 -> 169 -> 185 -> -> 582 -> 102 -> 201 -> 217 -> 233 -> 249 -> 265 -> 281 -> 598 -> 118 -> 119 -> 120 -> 614 -> 297 -> 313 -> 329 -> 345 -> 361 -> 377 -> 615 -> 616 -> 121 -> 617 -> 122 -> 393 -> 409 -> 425 -> 618 -> 123 -> 619 441 -> 457 -> 473 -> -> 124 -> 620 -> 489 -> 490 -> 475 -> 125 -> 621 -> 126 459 -> 443 -> 427 -> -> 622 -> 127 -> 411 -> 395 -> 379 -> 623 -> 128 -> 624 363 -> 347 -> 331 -> -> 5 -> 21 -> 501 -315 -> 299 -> 283 -> > 517 -> 37 -> 533 267 -> 251 -> 235 -> -> 53 -> 549 -> 69 219 -> 203 -> 187 -> 188 -> 189 -> 190 -> -> 565 -> 85 -> 581 -> 101 -> 597 191 -> 192 -> 208 -> -> 117 -> 613 -> 223 -> 222 -> 221 -> 133 -> 134 -> 135 237 -> 253 -> 269 -> -> 629 -> 630 -> 285 -> 301 -> 317 -> 631 -> 136 -> 632 333 -> 349 -> 365 -> -> 137 -> 633 -> 381 -> 397 -> 413 -> 138 -> 634 -> 139 429 -> 445 -> 461 -> -> 635 -> 140 -> 477 -> 493 -> 494 -> 636 -> 141 -> 637 479 -> 463 -> 447 -> -> 142 -> 638 -> 431 -> 415 -> 399 -> 143 -> 639 -> 144 383 -> 367 -> 351 -> -> 640 -> 4 -> 20 -335 -> 319 -> 303 -> 287 -> 271 -> 255 -> > 500 -> 516 -> 36 -> 532 -> 52 -> 256 -> 751 -> 752 -> 548 -> 68 -> 564 -272 -> 767 -> 768 -> > 84 -> 580 -> 100 288 -> 783 -> 784 -> -> 596 -> 116 -> 304 -> 799 -> 800 -> 612 -> 132 -> 628 320 -> 815 -> 816 -> -> 148 -> 149 -> 336 -> 831 -> 832 -> 150 -> 644 -> 645 352 -> 847 -> 848 -> -> 646 -> 151 -> 368 -> 863 -> 864 -> 647 -> 152 -> 648 384 -> 879 -> 880 -> -> 153 -> 649 -> 400 -> 895 -> 896 -> 154 -> 650 -> 155 416 -> 911 -> 912 -> -> 651 -> 156 -> 432 -> 927 -> 928 -> 448 -> 943 -> 944 -> 652 -> 157 -> 653 -> 158 -> 654 -> 464 -> 480 -> 496 -> 159 -> 655 -> 160 959 -> 960 -> 976 -> -> 656 -> 3 -> 19 -992 -> 495 -> 975 -> > 499 -> 515 -> 35 991 -> 989 -> 990 -> -> 531 -> 51 -> 478 -> 973 -> 974 -> 547 -> 67 -> 563 -462 -> 957 -> 958 -> > 83 -> 579 -> 99 -446 -> 941 -> 942 -> > 595 -> 115 -> 430 -> 925 -> 926 -> 611 -> 131 -> 627 -414 -> 909 -> 910 -> > 147 -> 643 -> 398 -> 893 -> 894 -> 163 -> 164 -> 165 382 -> 877 -> 878 -> 366 -> 861 -> 862 -> -> 659 -> 660 -> 661 -> 166 -> 662 350 -> 845 -> 846 -> -> 167 -> 663 -> 334 -> 829 -> 830 -> 168 -> 664 -> 169 318 -> 813 -> 814 -> -> 665 -> 170 -> 302 -> 797 -> 798 -> 666 -> 171 -> 667 286 -> 781 -> 782 -> 270 -> 765 -> 766 -> -> 172 -> 668 -> 173 -> 669 -> 174 254 -> 749 -> 750 -> -> 670 -> 175 -> 717 -> 733 -> 238 -> 671 -> 176 -> 672 239 -> 240 -> 718 -> -> 2 -> 18 -> 498 -734 -> 735 -> 736 -> > 514 -> 34 -> 530 224 -> 719 -> 720 -> -> 50 -> 546 -> 66 688 -> 704 -> 207 -> -> 562 -> 82 -> 687 -> 703 -> 206 -> 578 -> 98 -> 594 -686 -> 702 -> 205 -> > 114 -> 610 -> 685 -> 701 -> 683 -> 130 -> 626 -> 146 684 -> 204 -> 699 -> -> 642 -> 162 -> 700 -> 220 -> 715 -> 716 -> 236 -> 731 -> 658 -> 178 -> 179 -> 180 -> 674 -> 732 -> 252 -> 747 -> 675 -> 676 -> 181 748 -> 268 -> 763 -> -> 677 -> 182 -> 764 -> 284 -> 779 -> 678 -> 183 -> 679 780 -> 300 -> 795 -> -> 184 -> 680 -> 796 -> 316 -> 811 -> 185 -> 681 -> 186 812 -> 332 -> 827 -> -> 682 -> 187 -> 828 -> 348 -> 843 -> 683 -> 188 -> 684 844 -> 364 -> 859 -> -> 189 -> 685 -> 860 -> 380 -> 875 -> 190 -> 686 -> 191 876 -> 396 -> 891 -> -> 687 -> 192 -> 892 -> 412 -> 907 -> 908 -> 428 -> 923 -> 688 -> 1 -> 17 -> 497 -> 513 -> 33 -924 -> 444 -> 939 -> > 529 -> 49 -> 545 940 -> 460 -> 476 -> -> 65 -> 561 -> 81 492 -> 955 -> 956 -> *->* 577 *->* 97 *->* 972 -> 988 -> 491 -> 593 -> 113 -> 609 -971 -> 987 -> 985 -> > 129 -> 625 -> 986 -> 474 -> 969 -> 145 -> 641 -> 161 970 -> 458 -> 953 -> -> 657 -> 177 -> 954 -> 442 -> 937 -> 673 -> 193 -> 194 938 -> 426 -> 921 -> -> 195 -> 689 -> 922 -> 410 -> 905 ->

745		705 -> 706 -> 211 -> 707 -> 212 -> 708 -> 213 -> 709 -> 214 -> 710 -> 215 -> 711 -> 216 -> 713 -> 218 -> 714 -> 219 -> 715 -> 220 -> 716 -> 221 -> 717 -> 222 -> 718 -> 223 -> 719 -> 224 -> 720 -> 225 -> 226 -> 721 -> 722 -> 227 -> 723 -> 228 -> 724 -> 229 -> 725 -> 230 -> 726 -> 231 -> 727 -> 232 -> 728 -> 233 -> 729 -> 234 -> 730 -> 235 -> 731 -> 236 -> 732 -> 237 -> 733 -> 238 -> 734 -> 239 -> 735 -> 240 -> 736 -> 241 -> 242 -> 737 -> 245 -> 741 -> 246 -> 742 -> 247 -> 245 -> 741 -> 246 -> 742 -> 247 -> 743 -> 248 -> 744 -> 249 -> 745 -> 250 745 -> 232 -> 233	745 -> 232 -> 215 ->
	2	-> 234 -> 248 -> 249 -> 250 -> 264 -> 265 -> 266 ->	198 -> 181 -> 164 -> 147 -> 130 -> 113 -> 97 -> 81 -> 65 -> 49 -> 33 -> 17 -> 1 -> 2

-> 744 -> 746 -> -> 3 -> 4 -> 5 -> 6 -> 760 -> 761 -> 762 7 -> 8 -> 9 -> 10 -> 11 -> 12 -> 13 -> 14 -> 215 -> 216 -> 217 -> 231 -> 247 -> 15 -> 16 -> 32 -> -> 711 -> 712 -> 47 -> 46 -> 45 -> 44 713 -> 727 -> 743 -> 43 -> 42 -> 41 -> -> 218 -> 714 -> 40 -> 39 -> 38 -> 37 219 -> 235 -> 251 -> 36 -> 35 -> 51 -> -> 715 -> 731 -> 67 -> 83 -> 99 -> 747 -> 263 -> 759 116 -> 101 -> 85 -> -> 267 -> 763 -> 69 -> 70 -> 71 -> 72 279 -> 280 -> 281 -> 73 -> 74 -> 75 -> -> 775 -> 776 -> 76 -> 77 -> 78 -> 79 777 -> 282 -> 778 -> 80 -> 96 -> 111 -> -> 283 -> 779 -> 110 -> 109 -> 108 -> 198 -> 199 -> 200 107 -> 106 -> 105 -> -> 214 -> 230 -> 104 -> 103 -> 119 -> 694 -> 695 -> 696 134 -> 150 -> 167 -> -> 710 -> 726 -> 152 -> 137 -> 138 -> 201 -> 697 -> 202 139 -> 140 -> 141 -> -> 698 -> 246 -> 142 -> 143 -> 144 -> 742 -> 262 -> 758 160 -> 175 -> 174 -> 173 -> 172 -> 171 -> -> 203 -> 699 -> 204 -> 220 -> 236 170 -> 185 -> 201 -> -> 700 -> 716 -> 218 -> 203 -> 204 -> 732 -> 252 -> 748 205 -> 206 -> 207 -> -> 268 -> 764 -> 208 -> 224 -> 239 -> 278 -> 774 -> 284 238 -> 237 -> 236 -> -> 780 -> 294 -> 251 -> 267 -> 282 -> 295 -> 296 -> 790 281 -> 280 -> 263 -> -> 791 -> 792 -> 246 -> 229 -> 212 -> 297 -> 793 -> 298 195 -> 178 -> 161 -> -> 794 -> 299 -> 177 -> 193 -> 209 -> 795 -> 300 -> 796 225 -> 241 -> 257 -> -> 181 -> 182 -> 273 -> 289 -> 305 -> 183 -> 197 -> 213 321 -> 337 -> 353 -> -> 677 -> 678 -> 369 -> 385 -> 401 -> 679 -> 693 -> 709 417 -> 433 -> 449 -> -> 184 -> 680 -> 465 -> 481 -> 482 -> 185 -> 681 -> 229 467 -> 451 -> 435 -> -> 725 -> 245 -> 419 -> 403 -> 387 -> 741 -> 186 -> 682 371 -> 355 -> 339 -> -> 187 -> 683 -> 323 -> 307 -> 291 -> 261 -> 757 -> 277 275 -> 259 -> 243 -> -> 773 -> 188 -> 739 -> 260 -> 277 -> 684 -> 189 -> 205 293 -> 309 -> 325 -> -> 221 -> 685 -> 341 -> 357 -> 373 -> 701 -> 717 -> 237 389 -> 405 -> 421 -> -> 733 -> 253 -> 437 -> 453 -> 469 -> 749 -> 269 -> 765 485 -> 486 -> 471 -> -> 285 -> 781 -> 455 -> 439 -> 423 -> 293 -> 789 -> 301 407 -> 391 -> 375 -> -> 797 -> 309 -> 359 -> 343 -> 327 -> 310 -> 311 -> 805 -311 -> 312 -> 313 -> > 806 -> 807 -> 314 -> 315 -> 300 -> 312 -> 808 -> 313 285 -> 269 -> 270 -> 271 -> 272 -> 288 -> -> 809 -> 314 -> 810 -> 315 -> 811 -303 -> 318 -> 333 -> > 316 -> 812 -> 348 -> 347 -> 346 -> 317 -> 813 -> 164 345 -> 361 -> 377 -> -> 165 -> 166 -> 393 -> 409 -> 425 -> 441 -> 457 -> 473 -> 180 -> 196 -> 660 -> 661 -> 662 -> 489 -> 490 -> 475 -> 676 -> 692 -> 167 459 -> 443 -> 427 -> 411 -> 395 -> 379 -> -> 663 -> 168 -> 664 -> 212 -> 708 380 -> 381 -> 366 -> -> 228 -> 724 -> 351 -> 336 -> 352 -> 169 -> 665 -> 170 368 -> 384 -> 399 -> -> 666 -> 244 -> 414 -> 413 -> 429 -> 445 -> 461 -> 477 -> 740 -> 260 -> 756 -> 171 -> 667 -> 493 -> 494 -> 479 -> 463 -> 447 -> 432 -> 172 -> 668 -> 276 -> 772 -> 292 -> 928 -> 448 -> 943 -> 788 -> 173 -> 669 944 -> 464 -> 480 -> -> 174 -> 190 -> 496 -> 959 -> 960 -> 206 -> 670 -> 686 976 -> 992 -> 495 -> -> 702 -> 222 -> 975 -> 991 -> 989 -> 718 -> 238 -> 734 990 -> 478 -> 973 -> -> 254 -> 750 -> 974 -> 462 -> 957 -> 270 -> 766 -> 286 958 -> 446 -> 941 -> -> 782 -> 302 -> 942 -> 430 -> 431 -> 798 -> 308 -> 804 909 -> 925 -> 926 -> -> 318 -> 814 -> 927 -> 415 -> 416 -> 324 -> 325 -> 326 910 -> 911 -> 912 -> -> 820 -> 821 -> 400 -> 895 -> 896 -> 822 -> 327 -> 823 880 -> 832 -> 848 -> -> 328 -> 824 -> 864 -> 367 -> 383 -> 329 -> 825 -> 330 847 -> 863 -> 879 -> -> 826 -> 331 -> 382 -> 398 -> 862 -> 827 -> 332 -> 828 878 -> 894 -> 397 -> -> 333 -> 829 -> 877 -> 893 -> 875 -> 334 -> 830 -> 147 876 -> 396 -> 891 -> -> 148 -> 149 -> 892 -> 412 -> 907 -> 163 908 -> 428 -> 923 -> 924 -> 444 -> 939 -> 940 -> 460 -> 476 -> 492 -> 955 -> 956 -> 972 -> 988 -> 491 -> 971 -> 987 -> 985 -> 986 -> 474 -> 969 ->

970 -> 458	-> 953 ->
954 -> 442	
938 -> 426	
	-
922 -> 410	
906 -> 394	-> 889 ->
890 -> 378	-> 873 ->
874 -> 841	-> 857 ->
362 -> 842	
363 -> 364	
843 -> 859	
861 -> 349	
844 -> 845	-> 846 ->
334 -> 335	-> 829 ->
830 -> 831	-> 319 ->
320 -> 814	
816 -> 304	
800 -> 768	
287 -> 767	
286 -> 302	-> 765 ->
766 -> 782	-> 798 ->
301 -> 317	-> 781 ->
797 -> 813	
332 -> 796	
828 -> 331	
827 -> 330	-> 810 ->
826 -> 329	-> 809 ->
825 -> 807	-> 808 ->
328 -> 823	-> 824 ->
344 -> 839	-
360 -> 855	
376 -> 871	
392 -> 887	-> 888 ->
408 -> 903	-> 904 ->
424 -> 919	-> 920 ->
440 -> 935	-> 936 ->
456 -> 472	
951 -> 952	
984 -> 487	
983 -> 981	
470 -> 965	-> 966 ->
454 -> 949	-> 950 ->
438 -> 933	
422 -> 917	
406 -> 901	
390 -> 885	
374 -> 869	
358 -> 853	-> 854 ->
342 -> 837	
326 -> 821	
310 -> 805	
310 -/ 603	-/ 000 -/

294 -> 789	-> 790 ->
773 -> 755	
276 -> 771	
292 -> 787	-> 788 ->
308 -> 803	-> 804 ->
324 -> 819	-> 820 ->
340 -> 835	
356 -> 851	
372 -> 867	-> 868 ->
388 -> 883	-> 884 ->
404 -> 899	-> 900 ->
420 -> 915	
436 -> 931	
452 -> 468	-> 484 ->
947 -> 948	-> 964 ->
980 -> 483	-> 963 ->
979 -> 977	
466 -> 961	
450 -> 945	
434 -> 929	-> 930 ->
418 -> 913	-> 914 ->
402 -> 897	-> 898 ->
386 -> 881	
370 -> 865	
354 -> 849	
338 -> 833	-> 834 ->
322 -> 817	-> 818 ->
306 -> 801	-> 802 ->
290 -> 785	
274 -> 769	
258 -> 753	-> 754 ->
242 -> 737	-> 738 ->
226 -> 721	-> 722 ->
705 -> 657	
689 -> 194	
674 -> 690	
211 -> 227	
707 -> 723	-> 228 ->
244 -> 708	-> 724 ->
740 -> 245	-> 261 ->
725 -> 741	
262 -> 278	_
758 -> 774	
295 -> 759	
791 -> 296	-> 776 ->
792 -> 297	-> 298 ->
299 -> 777	
794 -> 795	
284 -> 778	
780 -> 268	-> 763 ->

764 -> 747 -> 252 -> 732 -> 748 -> 253 -> 733 -> 749 -> 254 -> 255 -> 256 -> 734 -> 750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 155 -> 637 -> 653 -> 156 -> 637 -> 653 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 655 -> 158 -> 657 -> 158 -> 657 -> 657 -> 158 -> 657 -> 55									
732 -> 748 -> 253 -> 733 -> 749 -> 254 -> 255 -> 256 -> 734 -> 750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 636 -> 652 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 637 -> 653 -> 156 -> 637 -> 653 -> 156 -> 637 -> 653 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 158 -> 638 -> 654 -> 159 -> 639 -> 633 -> 150 -> 630 -> 631 -> 150 -> 630 -> 630 -> 631 -> 15	7	764	->	74	7	->	25	2 ->	
733 -> 749 -> 254 -> 255 -> 256 -> 734 -> 750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 636 -> 652 -> 155 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 121 -> 601 -> 617 -> 122 -> 602 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
255 -> 256 -> 734 -> 750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 636 -> 654 -> 159 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 153 -> 169 -> 633 -> 649 -> 665 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 153 -> 169 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 159 -> 639 -> 655 -> 156 -> 636 -> 652 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
750 -> 751 -> 752 -> 240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 159 -> 639 -> 655 -> 156 -> 636 -> 652 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 573 -> 589 -> 92 -> 572 -> 588 ->	2	255	->	25	6	->	73	4 ->	
240 -> 735 -> 736 -> 704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 155 -> 637 -> 653 -> 156 -> 636 -> 652 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 637 -> 651 -> 154 -> 637 -> 653 -> 155 -> 637 -> 651 -> 154 -> 637 -> 653 -> 155 -> 637 -> 653 -> 156 -> 637 -> 653 -> 157 -> 637 -> 637 -> 637 -> 158 -> 638 -> 654 -> 159 -> 637 -> 653 -> 159 -> 655 -> 159 -> 150 -> 655 -> 150 -> 15									
704 -> 720 -> 223 -> 703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 156 -> 636 -> 652 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 636 -> 652 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 573 -> 589 -> 92 -> 573 -> 589 -> 93 -> 573 -> 589 -> 92 -> 573 -> 588 ->									
703 -> 719 -> 222 -> 702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 159 -> 639 -> 655 -> 156 -> 636 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 154 -> 636 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 124 -> 604 -> 667 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 155 -> 635 -> 651 -> 154 -> 634 -> 664 -> 649 -> 665 -> 168 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	7	704	->	72	0	->	22	3 ->	
702 -> 718 -> 221 -> 701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 155 -> 635 -> 651 -> 154 -> 634 -> 664 -> 649 -> 665 -> 168 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 637 -> 653 -> 155 -> 635 -> 651 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	7	703	->	71	9	->	22	2 ->	
701 -> 717 -> 220 -> 700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 661 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
700 -> 716 -> 219 -> 235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 667 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 661 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
235 -> 699 -> 715 -> 731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 667 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 154 -> 665 -> 168 -> 155 -> 665 -> 168 -> 156 -> 667 -> 667 -> 157 -> 677 -> 677 -> 158 -> 677 -> 677 -> 159 -> 677 -> 150 -> 150 -> 15									
731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 636 -> 651 -> 154 -> 636 -> 651 -> 154 -> 636 -> 651 -> 154 -> 636 -> 665 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	7	700	->	71	6	->	21	9 ->	
731 -> 714 -> 202 -> 697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 636 -> 651 -> 154 -> 636 -> 651 -> 154 -> 636 -> 651 -> 154 -> 636 -> 665 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->		235	->	69	9	->	71	5 ->	
697 -> 698 -> 681 -> 186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 636 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
186 -> 666 -> 682 -> 187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 649 -> 665 -> 168 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
187 -> 667 -> 683 -> 188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 649 -> 665 -> 168 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	186	->	66	6	->	68	2 ->	
188 -> 668 -> 684 -> 189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->		187	->	66	7	->	68	3 ->	
189 -> 669 -> 685 -> 190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
190 -> 191 -> 192 -> 670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
670 -> 686 -> 687 -> 688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 649 -> 665 -> 168 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	189	->	66	9	->	68	5 ->	
688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	'	190	->	19	1	->	19	2 ->	
688 -> 176 -> 671 -> 672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	6	370	->	68	6	->	68	7 _>	
672 -> 640 -> 656 -> 159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
159 -> 639 -> 655 -> 158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	(	372	->	64	0	->	65	6 ->	
158 -> 638 -> 654 -> 157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	'	159	->	63	9	->	65	5 ->	
157 -> 637 -> 653 -> 156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
156 -> 636 -> 652 -> 155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
155 -> 635 -> 651 -> 154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 639 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 639 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	^	156	->	63	6	->	65	2 ->	
154 -> 634 -> 650 -> 153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 639 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	-	155	->	63	5	->	65	1 ->	
153 -> 169 -> 633 -> 649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
649 -> 665 -> 168 -> 184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
184 -> 648 -> 664 -> 680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	153	->	16	9	->	63	3 ->	
680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	6	349	->	66	5	->	16	8 ->	
680 -> 663 -> 151 -> 646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->		184	->	64	8	->	66	4 ->	
646 -> 647 -> 135 -> 136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
136 -> 630 -> 631 -> 632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	'				_			-	
632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	6	346	->	64	7	->	13	5 ->	
632 -> 599 -> 615 -> 120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	-	136	->	63	0	->	63	1 ->	
120 -> 600 -> 616 -> 121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	16	332	->	59	q	->	61	5 ->	
121 -> 601 -> 617 -> 122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
122 -> 602 -> 618 -> 123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
123 -> 603 -> 619 -> 124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	121	->	60	1	->	61	/ ->	
124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	122	->	60	2	->	61	8 ->	
124 -> 604 -> 620 -> 125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->		123	->	60	3	->	61	9 ->	
125 -> 605 -> 621 -> 126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
126 -> 127 -> 128 -> 606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->							-	_	
606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	125	->	60	5	->	62	1 ->	
606 -> 622 -> 623 -> 624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	1	126	->	12	7	->	12	8 ->	
624 -> 112 -> 607 -> 608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	6	306	->	62	2	->	62	3 ->	
608 -> 576 -> 592 -> 95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
95 -> 575 -> 591 -> 94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
94 -> 574 -> 590 -> 93 -> 573 -> 589 -> 92 -> 572 -> 588 ->	(	95 -	> 5	75	-:	> 5	91	->	
93 -> 573 -> 589 -> 92 -> 572 -> 588 ->									
92 -> 572 -> 588 ->									
91 -> 571 -> 587 ->									
	(	<del>)</del> 1 -:	> 5	71	-:	> 5	87	->	

90 -> 570 -> 586 -> 89 -> 569 -> 585 -> 88 -> 568 -> 584 -> 87 -> 567 -> 583 -> 565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 541 -> 557 -> 62 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 28 -> 504 -> 520 -> 530 -> 514 -> 517 -> 20 -> 504 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 -> 641 -> 131 -> 132 ->	
89 -> 569 -> 585 -> 88 -> 568 -> 584 -> 87 -> 567 -> 583 -> 565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 536 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 560 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 507 -> 523 -> 524 -> 27 -> 507 -> 523 -> 525 -> 506 -> 524 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 523 -> 549 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 504 -> 520 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	90 -> 570 -> 586 ->
88 -> 568 -> 584 -> 87 -> 567 -> 583 -> 565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 554 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 534 -> 559 -> 560 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 544 -> 512 -> 558 -> 550 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 510 -> 510 -> 510 -> 520 -> 501 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 545 -> 546 -> 56 -> 561 -> 562 -> 529 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 504 -> 505 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
87 -> 567 -> 583 -> 565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 534 -> 550 -> 55 -> 536 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 563 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 531 -> 547 -> 52 -> 536 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 536 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 505 -> 517 -> 517 -> 20 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 505 -> 545 -> 546 -> 66 -> 561 -> 546 -> 66 -> 561 -> 547 -> 518 -> 513 -> 514 -> 34 -> 529 -> 504 -> 515 -> 545 -> 546 -> 66 -> 561 -> 547 -> 548 -> 545 -> 548 -> 545 -> 546 -> 560 -> 545 -> 546 -> 560 -> 545 -> 546 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	89 -> 569 -> 585 ->
87 -> 567 -> 583 -> 565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 534 -> 550 -> 55 -> 536 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 563 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 531 -> 547 -> 52 -> 536 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 536 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 504 -> 517 -> 20 -> 505 -> 517 -> 517 -> 20 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 505 -> 545 -> 546 -> 66 -> 561 -> 546 -> 66 -> 561 -> 547 -> 518 -> 513 -> 514 -> 34 -> 529 -> 504 -> 515 -> 545 -> 546 -> 66 -> 561 -> 547 -> 548 -> 545 -> 548 -> 545 -> 546 -> 560 -> 545 -> 546 -> 560 -> 545 -> 546 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	88 -> 568 -> 584 ->
565 -> 566 -> 86 -> 102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 534 -> 550 -> 55 -> 536 -> 552 -> 57 -> 537 -> 553 -> 553 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 531 -> 543 -> 544 -> 512 -> 558 -> 560 -> 48 -> 559 -> 560 -> 48 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 516 -> 19 -> 498 -> 518 -> 513 -> 514 -> 517 -> 20 -> 500 -> 516 -> 19 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 500 -> 515 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 561 -> 541 -> 557 -> 62 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 541 -> 557 -> 62 -> 63 -> 64 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 530 -> 545 -> 546 -> 66 -> 561 -> 540 -> 515 -> 549 -> 540 -> 515 -> 545 -> 546 -> 66 -> 561 -> 540 -> 515 -> 545 -> 546 -> 66 -> 561 -> 540 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	87 -> 567 -> 583 ->
102 -> 118 -> 581 -> 582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 561 -> 541 -> 557 -> 62 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 541 -> 557 -> 62 -> 63 -> 64 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 504 -> 524 -> 27 -> 507 -> 523 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 530 -> 545 -> 546 -> 66 -> 561 -> 540 -> 515 -> 549 -> 540 -> 515 -> 545 -> 546 -> 66 -> 561 -> 540 -> 515 -> 545 -> 546 -> 66 -> 561 -> 540 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	565 > 566 > 86 >
582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 563 -> 564 -> 531 -> 554 -> 59 -> 536 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540	
582 -> 598 -> 614 -> 117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 563 -> 564 -> 531 -> 554 -> 59 -> 536 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 522 -> 25 -> 507 -> 523 -> 26 -> 504 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 530 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540 -> 540 -> 520 -> 540	102 -> 118 -> 581 ->
117 -> 133 -> 597 -> 613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 506 -> 522 -> 25 -> 507 -> 523 -> 523 -> 507 -> 523 -> 26 -> 507 -> 523 -> 503 -> 504 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 14 -> 15 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 521 -> 24 -> 504 -> 550 -> 521 -> 24 -> 504 -> 550 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 523 -> 26 -> 506 -> 523 -> 26 -> 506 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 530 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
613 -> 629 -> 612 -> 100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 521 -> 24 -> 504 -> 550 -> 521 -> 24 -> 504 -> 550 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 523 -> 26 -> 506 -> 523 -> 26 -> 506 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 530 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	117 -> 133 -> 597 ->
100 -> 595 -> 596 -> 84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 538 -> 554 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 502 -> 518 -> 21 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 ->	
84 -> 579 -> 580 -> 68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 538 -> 554 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 502 -> 518 -> 21 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 ->	100 -> 595 -> 596 ->
68 -> 563 -> 564 -> 531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 506 -> 521 -> 24 -> 504 -> 550 -> 510 -> 541 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 506 -> 521 -> 24 -> 506 -> 522 -> 25 -> 506 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 510 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 504 -> 507 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	84 -> 579 -> 580 ->
531 -> 547 -> 52 -> 532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	68 -> 563 -> 564 ->
532 -> 548 -> 53 -> 533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 502 -> 518 -> 21 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 51	
533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 503 -> 519 -> 22 -> 504 -> 519 -> 22 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 504 -> 505 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	531 -> 547 -> 52 ->
533 -> 549 -> 54 -> 534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 503 -> 519 -> 22 -> 504 -> 519 -> 22 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 504 -> 505 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	532 -> 548 -> 53 ->
534 -> 550 -> 55 -> 535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 521 -> 24 -> 504 -> 520 -> 23 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 503 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 501 -> 510 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	533 -> 549 -> 54 ->
535 -> 551 -> 56 -> 536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 504 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 501 -> 510 -> 510 -> 520 -> 23 -> 501 -> 510 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 510 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	534 -> 550 -> 55 ->
536 -> 552 -> 57 -> 537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 504 -> 505 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
537 -> 553 -> 58 -> 538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 506 -> 522 -> 25 -> 506 -> 522 -> 25 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	536 -> 552 -> 57 ->
538 -> 554 -> 59 -> 539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 504 -> 520 -> 23 -> 501 -> 510 -> 510 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	537 -> 553 -> 58 ->
539 -> 555 -> 60 -> 540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	538 -> 554 -> 59 ->
540 -> 556 -> 61 -> 541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
541 -> 557 -> 62 -> 63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	540 -> 556 -> 61 ->
63 -> 64 -> 542 -> 558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 522 -> 23 -> 503 -> 519 -> 22 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 501 -> 517 -> 20 -> 501 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
558 -> 559 -> 560 -> 48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	63 -> 64 -> 542 ->
48 -> 543 -> 544 -> 512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	558 -> 559 -> 560 ->
512 -> 528 -> 31 -> 511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 506 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
511 -> 527 -> 30 -> 510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	512 -> 528 -> 31 ->
510 -> 526 -> 29 -> 509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	511 -> 527 -> 30 ->
509 -> 525 -> 28 -> 508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	510 -> 526 -> 29 ->
508 -> 524 -> 27 -> 507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	509 -> 525 -> 28 ->
507 -> 523 -> 26 -> 506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
506 -> 522 -> 25 -> 505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	507 -> 523 -> 26 ->
505 -> 521 -> 24 -> 504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
504 -> 520 -> 23 -> 503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	505 -> 521 -> 24 ->
503 -> 519 -> 22 -> 502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	504 -> 520 -> 23 ->
502 -> 518 -> 21 -> 501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	503 -> 519 -> 22 ->
501 -> 517 -> 20 -> 500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	502 -> 518 -> 21 ->
500 -> 516 -> 19 -> 499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	501 -> 51/ -> 20 ->
499 -> 515 -> 497 -> 498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	500 -> 516 -> 19 ->
498 -> 18 -> 513 -> 514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
514 -> 34 -> 529 -> 530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	498 -> 18 -> 513 ->
530 -> 50 -> 545 -> 546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
546 -> 66 -> 561 -> 562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	530 -> 50 -> 545 ->
562 -> 82 -> 577 -> 578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	546 -> 66 -> 561 ->
578 -> 98 -> 593 -> 594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	562 -> 82 -> 577 ->
594 -> 114 -> 115 -> 129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	578 -> 98 -> 593 ->
129 -> 145 -> 609 -> 610 -> 611 -> 625 ->	
610 -> 611 -> 625 ->	594 -> 114 -> 115 ->
610 -> 611 -> 625 ->	129 -> 145 -> 609 ->
641 -> 131 -> 132 ->	
·	641 -> 131 -> 132 ->

			146 -> 162 -> 626 -> 627 -> 628 -> 642 -> 658 -> 148 -> 149 -> 163
96	510	96 -> 79 -> 80 -> 95 -> 111 -> 112 -> 575 -> 576 -> 591 -> 592 -> 607 -> 608 -> 62 -> 63 -> 64 -> 78 -> 94 -> 558 -> 559 -> 560 -> 574 -> 590 -> 110 -> 606 -> 126 -> 127 -> 128 -> 622 -> 623 -> 624 -> 45 -> 46 -> 47 -> 542 -> 543 -> 557 -> 573 -> 48 -> 544 -> 93 -> 589 -> 109 -> 605 -> 125 -> 621 -> 141 -> 142 -> 143 -> 637 -> 638 -> 639 -> 144 -> 640 -> 28 -> 29 -> 30 -> 44 -> 60 -> 524 -> 525 -> 526 -> 540 -> 556 -> 31 -> 527 -> 32 -> 528 -> 76 -> 572 -> 92 -> 588 -> 108 -> 604 -> 124 -> 620 -> 140 -> 636 -> 156 -> 157 -> 158 -> 652 -> 653 -> 654 -> 159 -> 655 -> 160 -> 656 -> 11 -> 12 -> 13 -> 27 -> 43 -> 507 -> 508 -> 509 -> 523 -> 539 -> 14 -> 510	96 -> 79 -> 62 -> 45 -> 28 -> 11 -> 10 -> 9 -> 8 -> 7 -> 6 -> 5 -> 4 -> 3 -> 2 -> 1 -> 17 -> 33 -> 49 -> 65 -> 81 -> 97 -> 113 -> 129 -> 145 -> 161 -> 177 -> 193 -> 209 -> 225 -> 241 -> 257 -> 273 -> 289 -> 305 -> 321 -> 337 -> 353 -> 369 -> 385 -> 401 -> 417 -> 433 -> 449 -> 465 -> 481 -> 482 -> 467 -> 451 -> 435 -> 419 -> 403 -> 387 -> 371 -> 355 -> 339 -> 323 -> 307 -> 291 -> 275 -> 259 -> 243 -> 227 -> 211 -> 195 -> 179 -> 163 -> 147 -> 131 -> 115 -> 99 -> 83 -> 67 -> 51 -> 35 -> 36 -> 37 -> 38 -> 39 -> 40 -> 41 -> 42 -> 59 -> 74 -> 73 -> 72 -> 71 -> 70 -> 69 -> 85 -> 101 -> 117 -> 133 -> 149 -> 165 -> 181 -> 197 -> 213 -> 229 -> 245 -> 261 -> 277 -> 293 -> 309 -> 325 -> 341 -> 357 -> 373 -> 389 -> 405 -> 421 -> 437 -> 453 -> 469 -> 485 -> 486 -> 471 -> 455 -> 439 -> 423 -> 407 -> 391 -> 375 -> 359 -> 343 -> 327 -> 311 -> 295 -> 279 -> 263 -> 247 -> 231 -> 215 -> 199 -> 183 -> 167 -> 151 -> 135 -> 119 -> 103 -> 104 -> 105 -> 106 -> 107 -> 92 -> 93 ->

110 -> 125 -> 140 ->
139 -> 138 -> 137 ->
153 -> 169 -> 185 ->
201 -> 217 -> 233 ->
249 -> 265 -> 281 ->
297 -> 313 -> 329 ->
345 -> 361 -> 377 ->
393 -> 409 -> 425 ->
441 -> 457 -> 473 ->
489 -> 490 -> 475 ->
459 -> 443 -> 427 ->
411 -> 395 -> 379 ->
363 -> 347 -> 331 ->
315 -> 299 -> 283 ->
267 -> 251 -> 235 ->
219 -> 203 -> 187 ->
171 -> 172 -> 173 ->
158 -> 143 -> 128 ->
144 -> 160 -> 176 ->
191 -> 206 -> 205 ->
221 -> 237 -> 253 ->
269 -> 285 -> 301 ->
317 -> 333 -> 349 ->
365 -> 381 -> 397 ->
413 -> 429 -> 445 ->
461 -> 477 -> 493 ->
494 -> 479 -> 463 ->
447 -> 431 -> 415 ->
399 -> 383 -> 367 ->
351 -> 335 -> 319 ->
303 -> 287 -> 271 ->
255 -> 239 -> 224 ->
720 -> 240 -> 735 ->
736 -> 256 -> 751 ->
752 -> 272 -> 767 ->
768 -> 288 -> 783 ->
784 -> 304 -> 799 ->
800 -> 320 -> 815 ->
816 -> 336 -> 831 ->
832 -> 352 -> 847 ->
848 -> 368 -> 863 ->
864 -> 384 -> 879 ->
880 -> 400 -> 895 ->
896 -> 416 -> 911 ->
912 -> 432 -> 927 ->
928 -> 448 -> 943 ->
944 -> 464 -> 480 ->
496 -> 959 -> 960 ->
976 -> 992 -> 495 ->
975 -> 991 -> 989 ->
010 - 991 - 909 <b>-</b>

990 -> 478 -> 9	973 ->
974 -> 462 -> 9	957 ->
958 -> 446 -> 9	
942 -> 430 -> 9	925 ->
926 -> 414 -> 9	909 ->
910 -> 398 -> 8	193 ->
894 -> 382 -> 8	
878 -> 366 -> 8	361 ->
862 -> 350 -> 8	345 ->
846 -> 334 -> 8	329 ->
830 -> 318 -> 8	
814 -> 302 -> 7	
798 -> 286 -> 7	'81 <b>-</b> >
782 -> 270 -> 7	'65 <b>-</b> >
766 -> 254 -> 7	
750 -> 238 -> 7	
734 -> 222 -> 2	223 ->
701 -> 717 -> 7	′18 <b>-</b> >
719 -> 207 -> 2	
702 -> 703 -> 7	
192 -> 687 -> 6	88 ->
672 -> 624 -> 6	340 ->
656 -> 159 -> 1	75 ->
639 -> 655 -> 6	
174 -> 190 -> 6	
670 -> 686 -> 1	89 ->
669 -> 685 -> 6	67 ->
668 -> 188 -> 6	
684 -> 204 -> 6	
700 -> 220 -> 7	
716 -> 236 -> 7	'31 <b>-</b> >
732 -> 252 -> 7	′47 ->
748 -> 268 -> 7	
764 -> 284 -> 7	
780 -> 300 -> 7	'95 <b>-</b> >
796 -> 316 -> 8	311 ->
812 -> 332 -> 8	27 ->
828 -> 348 -> 8	
844 -> 364 -> 8	359 ->
860 -> 380 -> 8	375 ->
876 -> 396 -> 8	391 ->
892 -> 412 -> 9	_
908 -> 428 -> 9	
924 -> 444 -> 9	939 ->
940 -> 460 -> 4	<del>-</del> 76 ->
492 -> 955 -> 9	-
972 -> 988 -> 4	
971 -> 987 -> 9	985 ->
986 -> 474 -> 9	969 ->
970 -> 458 -> 9	
100 - 0	. 55

954 -	> 442	->	937 ->
			921 ->
	_		_
922 -	> 410	->	905 ->
906 -	> 394	->	889 ->
			873 ->
			857 ->
858 -	> 346	->	841 ->
842 -	> 330	->	825 ->
			809 ->
	-		
			793 ->
794 -	> 282	->	777 ->
778 -	> 266	->	761 ->
			745 ->
746 -	> 234	->	729 ->
730 -	> 218	->	713 ->
			697 ->
			681 ->
682 -	> 170	->	665 ->
666 -	> 633	->	649 ->
			650 ->
			157 ->
635 -	> 651	->	652 ->
653 -	> 141	->	142 ->
			638 ->
			621 ->
622 -	> 623	->	606 ->
			605 ->
			588 ->
604 -	> 620	->	123 ->
603 -	> 619	->	122 ->
602 -	> 618	->	121 ->
			599 ->
600 ->	> 120	->	615 ->
616 -	> 136	->	631 ->
			647 ->
			663 ->
	_		679 ->
680 -	> 200	->	695 ->
			711 ->
			727 ->
			743 ->
744 -	> 264	->	759 ->
			775 ->
			_
_			791 ->
792 -	> 312	->	807 ->
808 -	> 328	->	823 ->
			839 ->
			855 ->
856 -	> 376	->	871 ->
872 -	> 392	->	887 ->
<b>-</b>	<b></b>		

888 -> 408 -> 903 ->
904 -> 424 -> 919 ->
920 -> 440 -> 935 ->
936 -> 456 -> 472 ->
488 -> 951 -> 952 ->
968 -> 984 -> 487 ->
967 -> 983 -> 981 ->
982 -> 470 -> 965 ->
966 -> 454 -> 949 ->
950 -> 438 -> 933 ->
934 -> 422 -> 917 ->
918 -> 406 -> 901 ->
902 -> 390 -> 885 ->
886 -> 374 -> 869 ->
870 -> 358 -> 853 ->
854 -> 342 -> 837 ->
838 -> 326 -> 821 ->
822 -> 310 -> 805 ->
806 -> 294 -> 789 ->
790 -> 278 -> 773 ->
774 -> 262 -> 757 ->
758 -> 246 -> 741 ->
742 -> 230 -> 725 ->
726 -> 214 -> 709 ->
710 -> 198 -> 693 ->
694 -> 182 -> 677 ->
678 -> 166 -> 661 ->
662 -> 150 -> 645 ->
646 -> 134 -> 629 ->
630 -> 118 -> 613 ->
614 -> 102 -> 597 ->
598 -> 565 -> 581 ->
86 -> 566 -> 582 ->
87 -> 567 -> 583 ->
88 -> 568 -> 584 -> 89 -> 90 -> 91 ->
569 -> 585 -> 586 ->
587 -> 75 -> 76 ->
570 -> 571 -> 572 ->
555 -> 58 -> 538 ->
554 -> 57 -> 537 ->
553 -> 56 -> 536 ->
552 -> 55 -> 535 ->
551 -> 54 -> 534 ->
550 -> 53 -> 533 ->
549 -> 531 -> 532 ->
52 -> 547 -> 548 ->
68 -> 563 -> 564 ->
84 -> 579 -> 580 ->
100 -> 595 -> 596 ->

116 -> 611 -> 61	2 ->
132 -> 627 -> 62	
148 -> 643 -> 64	14 ->
164 -> 659 -> 66	30 <b>-</b> >
180 -> 675 -> 67	
196 -> 691 -> 69	-
212 -> 707 -> 70	
228 -> 723 -> 72	
244 -> 739 -> 74	10 ->
260 -> 755 -> 75	56 ->
276 -> 771 -> 77	72 ->
292 -> 787 -> 78	
308 -> 803 -> 80	
324 -> 819 -> 82	20 ->
340 -> 835 -> 83	36 ->
356 -> 851 -> 85	52 ->
372 -> 867 -> 86	
388 -> 883 -> 88	
404 -> 899 -> 90	
420 -> 915 -> 9	
436 -> 931 -> 93	32 ->
452 -> 468 -> 48	34 ->
947 -> 948 -> 96	64 <b>-</b> >
980 -> 483 -> 96	33 ->
979 -> 977 -> 97	
466 -> 961 -> 96	
450 -> 945 -> 94	
434 -> 929 -> 93	
418 -> 913 -> 9	
402 -> 897 -> 89	98 ->
386 -> 881 -> 88	32 ->
370 -> 865 -> 86	36 ->
354 -> 849 -> 85	
338 -> 833 -> 83	-
322 -> 817 -> 8	
306 -> 801 -> 80	
290 -> 785 -> 78	
274 -> 769 -> 77	-
258 -> 753 -> 75	
242 -> 737 -> 73	38 ->
226 -> 721 -> 72	22 ->
210 -> 705 -> 70	)6 ->
194 -> 689 -> 69	
178 -> 673 -> 67	
162 -> 657 -> 65	
146 -> 641 -> 64	
130 -> 625 -> 62	
114 -> 609 -> 61	<b> 0 -&gt;</b>
98 -> 593 -> 594	1 ->
82 -> 577 -> 578	3 ->

			66 -> 561 -> 562 ->
			50 -> 545 -> 546 ->
			34 -> 529 -> 530 ->
			497 -> 513 -> 18 ->
			498 -> 514 -> 19 ->
			499 -> 515 -> 20 ->
			500 -> 516 -> 21 ->
			501 -> 517 -> 22 -> 502 -> 518 -> 23 ->
			503 -> 519 -> 24 ->
			504 -> 520 -> 25 ->
			505 -> 521 -> 26 ->
			506 -> 522 -> 12 ->
			13 -> 14 -> 15 -> 16
			-> 32 -> 48 -> 544 ->
			512 -> 528 -> 31 ->
			511 -> 527 -> 510
662	808	662 -> 149 -> 150	662 -> 149 -> 132 ->
		-> 151 -> 165 ->	115 -> 98 -> 81 ->
		166 -> 167 -> 181	65 -> 49 -> 33 -> 17
		-> 182 -> 183 ->	-> 1 -> 2 -> 3 -> 4 ->
		645 -> 646 -> 647	5 -> 6 -> 7 -> 8 -> 9
		-> 661 -> 663 ->	-> 10 -> 11 -> 12 -> 13 -> 14 -> 15 -> 16
		677 -> 678 -> 679 -> 132 -> 133 ->	-> 32 -> 47 -> 46 ->
		134 -> 148 -> 164	45 -> 44 -> 43 -> 42
		-> 628 -> 629 ->	-> 41 -> 40 -> 39 ->
		630 -> 644 -> 660	38 -> 37 -> 36 -> 35
		-> 135 -> 631 ->	-> 51 -> 67 -> 84 ->
		136 -> 152 -> 168	69 -> 70 -> 71 -> 72
		-> 632 -> 648 ->	-> 73 -> 74 -> 75 ->
		664 -> 180 -> 676	76 -> 77 -> 78 -> 79
		-> 184 -> 680 ->	-> 80 -> 96 -> 111 ->
		196 -> 197 -> 198	110 -> 109 -> 108 ->
		-> 692 -> 693 ->	107 -> 106 -> 105 ->
		694 -> 199 -> 695	104 -> 103 -> 102 ->
		-> 200 -> 696 -> 115 -> 116 -> 117 -	118 -> 135 -> 136 -> 137 -> 138 -> 139 ->
		> 131 -> 147 ->	140 -> 141 -> 142 ->
		611 -> 612 -> 613 -	_
		> 627 -> 643 ->	175 -> 174 -> 173 ->
		118 -> 614 -> 119 -	172 -> 171 -> 170 ->
		> 615 -> 163 ->	169 -> 168 -> 184 ->
		659 -> 179 -> 675	199 -> 198 -> 197 ->
		-> 120 -> 616 ->	180 -> 163 -> 146 ->
		121 -> 137 -> 153	129 -> 145 -> 161 ->
		-> 617 -> 633 ->	177 -> 193 -> 209 ->
		649 -> 169 -> 665	225 -> 241 -> 257 ->
		-> 185 -> 681 ->	273 -> 289 -> 305 ->
		195 -> 691 -> 201	321 -> 337 -> 353 ->

```
369 -> 385 -> 401 ->
-> 697 -> 211 ->
212 -> 213 -> 707
                     417 -> 433 -> 449 ->
-> 708 -> 709 ->
                     465 -> 481 -> 482 ->
214 -> 710 -> 215
                     467 -> 451 -> 435 ->
-> 711 -> 216 ->
                     419 -> 403 -> 387 ->
712 -> 217 -> 713
                     371 -> 355 -> 339 ->
-> 98 -> 99 -> 100
                     323 -> 307 -> 291 ->
-> 114 -> 130 ->
                     275 -> 259 -> 243 ->
594 -> 595 -> 596
                     227 -> 211 -> 707 ->
                     228 -> 229 -> 230 ->
-> 610 -> 626 ->
101 -> 597 -> 102
                     231 -> 232 -> 217 ->
                     202 -> 203 -> 204 ->
-> 598 -> 146 ->
642 -> 162 -> 658
                     205 -> 206 -> 207 ->
-> 103 -> 599 ->
                     208 -> 224 -> 239 ->
                     238 -> 237 -> 236 ->
104 -> 600 -> 178
                     235 -> 250 -> 265 ->
-> 674 -> 194 ->
690 -> 105 -> 601
                     264 -> 263 -> 262 ->
-> 106 -> 122 ->
                     261 -> 277 -> 293 ->
138 -> 602 -> 618
                     309 -> 325 -> 341 ->
-> 634 -> 154 ->
                     357 -> 373 -> 389 ->
650 -> 170 -> 666
                     405 -> 421 -> 437 ->
-> 186 -> 682 ->
                     453 -> 469 -> 485 ->
202 -> 698 -> 210
                     486 -> 471 -> 455 ->
-> 706 -> 218 ->
                     439 -> 423 -> 407 ->
714 -> 226 -> 227
                     391 -> 375 -> 359 ->
-> 228 -> 722 ->
                     343 -> 327 -> 311 ->
723 -> 724 -> 229
                     295 -> 296 -> 297 ->
-> 725 -> 230 ->
                     298 -> 283 -> 268 ->
726 -> 231 -> 727
                     269 -> 270 -> 271 ->
-> 232 -> 728 ->
                     272 -> 288 -> 303 ->
233 -> 729 -> 234
                     302 -> 301 -> 316 ->
-> 730 -> 81 -> 82
                     331 -> 330 -> 329 ->
-> 83 -> 97 -> 113
                     345 -> 361 -> 377 ->
-> 577 -> 578 ->
                     393 -> 409 -> 425 ->
579 -> 593 -> 609
                     441 -> 457 -> 473 ->
-> 84 -> 580 -> 85
                     489 -> 490 -> 475 ->
-> 581 -> 129 ->
                     459 -> 443 -> 427 ->
625 -> 145 -> 641
                     411 -> 395 -> 379 ->
-> 86 -> 582 -> 87
                     363 -> 364 -> 349 ->
-> 583 -> 161 ->
                     334 -> 335 -> 336 ->
657 -> 177 -> 673
                     352 -> 367 -> 382 ->
-> 88 -> 584 -> 89
                     397 -> 413 -> 429 ->
-> 585 -> 193 ->
                     445 -> 461 -> 477 ->
689 -> 209 -> 705
                     493 -> 494 -> 479 ->
-> 90 -> 586 -> 91
                     463 -> 447 -> 431 ->
-> 107 -> 123 ->
                     415 -> 400 -> 896 ->
587 -> 603 -> 619
                     416 -> 911 -> 912 ->
                     432 -> 927 -> 928 ->
-> 139 -> 635 ->
155 -> 651 -> 171
                     448 -> 943 -> 944 ->
-> 667 -> 187 ->
                     464 -> 480 -> 496 ->
```

```
683 -> 203 -> 699
                     959 -> 960 -> 976 ->
-> 219 -> 715 ->
                     992 -> 495 -> 975 ->
225 -> 721 -> 235
                     991 -> 989 -> 990 ->
-> 731 -> 241 ->
                     478 -> 973 -> 974 ->
242 -> 243 -> 737
                     462 -> 957 -> 958 ->
-> 738 -> 739 ->
                     446 -> 941 -> 942 ->
244 -> 740 -> 245
                     430 -> 925 -> 926 ->
-> 741 -> 246 ->
                     414 -> 909 -> 910 ->
742 -> 247 -> 743
                     398 -> 399 -> 893 ->
-> 248 -> 744 ->
                     894 -> 895 -> 383 ->
249 -> 745 -> 250
                     384 -> 878 -> 879 ->
-> 746 -> 251 ->
                     880 -> 368 -> 863 ->
747 -> 65 -> 66 ->
                     864 -> 832 -> 848 ->
561 -> 562 -> 67 -
                     351 -> 831 -> 847 ->
                     350 -> 366 -> 830 ->
> 563 -> 68 -> 564
-> 69 -> 565 -> 70
                     846 -> 862 -> 365 ->
-> 566 -> 71 ->
                     381 -> 845 -> 861 ->
567 -> 72 -> 568 -
                     877 -> 859 -> 860 ->
> 73 -> 569 -> 74 -
                     380 -> 875 -> 876 ->
> 570 -> 75 -> 571
                     396 -> 891 -> 892 ->
-> 76 -> 92 -> 108
                     412 -> 907 -> 908 ->
-> 572 -> 588 ->
                     428 -> 923 -> 924 ->
604 -> 124 -> 620
                     444 -> 939 -> 940 ->
-> 140 -> 636 ->
                     460 -> 476 -> 492 ->
156 -> 652 -> 172
                     955 -> 956 -> 972 ->
-> 668 -> 188 ->
                     988 -> 491 -> 971 ->
684 -> 204 -> 700
                     987 -> 985 -> 986 ->
-> 220 -> 716 ->
                     474 -> 969 -> 970 ->
236 -> 732 -> 252
                     458 -> 953 -> 954 ->
-> 748 -> 257 ->
                     442 -> 937 -> 938 ->
258 -> 753 -> 754
                     426 -> 921 -> 922 ->
-> 259 -> 755 ->
                     410 -> 905 -> 906 ->
260 -> 756 -> 261
                     394 -> 889 -> 890 ->
-> 757 -> 262 ->
                     378 -> 873 -> 874 ->
758 -> 263 -> 759
                     362 -> 857 -> 858 ->
-> 264 -> 760 ->
                     825 -> 841 -> 346 ->
265 -> 761 -> 266
                     347 -> 348 -> 826 ->
-> 762 -> 267 ->
                     842 -> 843 -> 844 ->
763 -> 268 -> 764
                     332 -> 333 -> 827 ->
                     828 -> 829 -> 812 ->
-> 49 -> 50 -> 545
-> 546 -> 51 ->
                     317 -> 797 -> 813 ->
547 -> 52 -> 548 -
                     318 -> 319 -> 320 ->
> 53 -> 549 -> 54 -
                     798 -> 814 -> 815 ->
> 550 -> 55 -> 551
                     816 -> 304 -> 799 ->
-> 56 -> 552 -> 57
                     800 -> 768 -> 784 ->
-> 553 -> 58 ->
                     287 -> 767 -> 783 ->
554 -> 59 -> 555 -
                     286 -> 766 -> 782 ->
> 60 -> 556 -> 61 -
                     285 -> 765 -> 781 ->
> 77 -> 93 -> 557 -
                     284 -> 300 -> 764 ->
> 573 -> 589 ->
                     780 -> 796 -> 299 ->
```

109 -> 605 -> 125
-> 621 -> 141 ->
637 -> 157 -> 653
-> 173 -> 669 ->
189 -> 685 -> 205
-> 701 -> 221 ->
717 -> 237 -> 733
-> 253 -> 749 ->
269 -> 765 -> 273
-> 274 -> 769 ->
770 -> 275 -> 771
-> 276 -> 772 ->
277 -> 773 -> 278
-> 774 -> 279 ->
775 -> 280 -> 776
-> 281 -> 777 ->
282 -> 778 -> 283
-> 779 -> 284 ->
780 -> 285 -> 781
-> 33 -> 34 -> 529
-> 530 -> 35 ->
531 -> 36 -> 532 -
> 37 -> 533 -> 38 -
> 534 -> 39 -> 535
-> 40 -> 536 -> 41
-> 537 -> 42 ->
538 -> 43 -> 539 -
> 44 -> 540 -> 45 -
> 541 -> 46 -> 62 -
> 78 -> 542 -> 558
-> 574 -> 94 ->
590 -> 110 -> 606 -
> 126 -> 622 ->
142 -> 638 -> 158
-> 654 -> 174 ->
670 -> 190 -> 686
-> 206 -> 702 ->
222 -> 718 -> 238
-> 734 -> 254 ->
750 -> 270 -> 766
-> 286 -> 782 ->
289 -> 290 -> 785
-> 786 -> 291 ->
787 -> 292 -> 788
-> 293 -> 789 ->
294 -> 790 -> 295
-> 791 -> 296 ->
792 -> 297 -> 793
-> 298 -> 794 ->
299 -> 795 -> 300

315 -> 779 -> 795 -> 811 -> 314 -> 794 -> 810 -> 313 -> 793 -> 809 -> 791 -> 792 -> 312 -> 807 -> 808

-> 796 -> 301 ->
797 -> 302 -> 798
-> 17 -> 18 -> 513
-> 514 -> 19 ->
515 -> 20 -> 516 -
> 21 -> 517 -> 22 -
> 518 -> 23 -> 519
-> 24 -> 520 -> 25
-> 521 -> 26 ->
522 -> 27 -> 523 -
> 28 -> 524 -> 29 -
> 525 -> 30 -> 526
-> 31 -> 47 -> 63 -
> 527 -> 543 ->
559 -> 79 -> 575 -
> 95 -> 591 -> 111
-> 607 -> 127 ->
623 -> 143 -> 639
-> 159 -> 655 ->
175 -> 671 -> 191
-> 687 -> 207 ->
703 -> 223 -> 719
-> 239 -> 735 ->
255 -> 751 -> 271
-> 767 -> 287 ->
783 -> 303 -> 799
-> 305 -> 306 ->
801 -> 802 -> 307
-> 803 -> 308 ->
804 -> 309 -> 805
-> 310 -> 806 ->
311 -> 807 -> 312 -
> 808

## Test 3:

Start node	Target node	BFS Time	BFS visited Node No	DFS Time	DFS visited Node No
943	1271	52.4000000022 ms	964	34.3000000007 ms	690
1098	1790	61.1000000015 ms	1148	166.599999997 8 ms	1994
1017	1137	4.899999985 ms	117	134.699999999 3 ms	1816
1233	1930	179.0000000000 ms	2109	67.0999999978 ms	1047
831	1311	18.9000000022 ms	450	121.600000001 5 ms	1616

514	1456	26.399999985 ms	598	38.1000000015 ms	661
361	318	7.199999999 ms	254	2.3000000007 ms	71
1826	181	15.699999993 ms	413	67.6999999993 ms	1107
2513	469	200.1000000015 ms	2315	227.500000000 0 ms	2420
1327	1032	19.199999993 ms	422	1.1000000015 ms	24
1016	2052	143.699999999 ms	1747	118.000000000 0 ms	1454
523	1669	99.9000000022 ms	1461	110.000000000 0 ms	1492
592	639	110.0000000000 ms	1492	21.7999999970 ms	404
206	1360	83.0000000000 ms	1256	68.1999999993 ms	1045
660	48	25.0000000000 ms	593	9.699999999 ms	243
402	537	35.6000000015 ms	782	161.899999998 5 ms	1981
1548	2444	254.8000000007 ms	2452	95.1999999993 ms	1319
1619	39	95.199999993 ms	1319	1.8999999985 ms	38
1126	1569	43.0000000000 ms	810	123.899999998 5 ms	1678
2125	2529	16.699999993 ms	416	80.1000000015 ms	1166

## نتيجه گيري:

حجم گراف (کم یال و پر یال): BFS به طور کلی برای گرافهای کم یال کارآمدتر است، زیرا به سرعت سطحهای مختلف را بررسی می کند. در گرافهای پر یال، BFS حافظه بیشتری مصرف می کند، اما همچنان کوتاه ترین مسیر را سریع تر پیدا می کند.

**DFS** کوه هدف نزدیک به گره شروع: BFS به دلیل بررسی سطح به سطح، به سرعت گرههای نزدیک را پیدا می کند، در حالی که DFS به صورت عمقی حرکت کرده و ممکن است چندین بار لازم شود تا به عقب برگردد تا گره در سطوح اولیه را پیدا کند.

گره هدف دور از گره مبدا: DFS به دلیل جستجوی عمیقی، در پیدا کردن گرههای دور سریعتر است.

پیمایش کل گراف: هر دو الگوریتم در پیمایش کل گراف می توانند کار آمد باشند، اما BFS سطح به سطح جلو می رود و همه گرهها را بررسی می کند، در حالی که DFS ممکن است چندین بار به عقب برگردد ولی اگر تعداد بازگشت ها زیاد نباشد قطعا از BFS در این مورد سریع تر خواهد بود.

تشخیص دور: هر دو الگوریتم می توانند دور را تشخیص دهند، اما بستگی به نوع گراف دارد. BFS در گرافهای بدون وزن کارآمدتر است زیرا وزن یالها در هر سطح یکسان است و DFS در گرافهای جهتدار زیرا بازگشت به عقب کمتر میشود.

اجرای موازی: BFS به دلیل پیمایش سطحی، به راحتی قابل موازیسازی است، در حالی که DFS کمتر مناسب اجرای موازی است. پیچیدگی پیاده سازی: الگوریتم DFS هم به دلیل استفاده از صف پیاده سازی ساده ای دارد.

استفاده از حافظه: BFS نیاز به حافظه بیشتری دارد، به خصوص در گرافهای بزرگ و پر یال. DFS ممکن است حافظه کمتری مصرف کند زیرا در عمق حرکت میکند.