**Topic Modeling**

**110th United States Congress with LDA and Mallet**

Maya Mileva

HW 8 IST 736

**![A large white building

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4SrsRXhpZgAATU0AKgAAAAgABgALAAIAAAAmAAAIYgESAAMAAAABAAEAAAExAAIAAAAmAAAIiAEyAAIAAAAUAAAIrodpAAQAAAABAAAIwuocAAcAAAgMAAAAVgAAEUYc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFdpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQAV2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NAAyMDIwOjA1OjE4IDE4OjE3OjEzAAAGkAMAAgAAABQAABEckAQAAgAAABQAABEwkpEAAgAAAAMwMAAAkpIAAgAAAAMwMAAAoAEAAwAAAAEAAQAA6hwABwAACAwAAAkQAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMDowNToxOCAxODoxNjowMgAyMDIwOjA1OjE4IDE4OjE2OjAyAAAAAAYBAwADAAAAAQAGAAABGgAFAAAAAQAAEZQBGwAFAAAAAQAAEZwBKAADAAAAAQACAAACAQAEAAAAAQAAEaQCAgAEAAAAAQAAGT8AAAAAAAAAYAAAAAEAAABgAAAAAf/Y/9sAQwAIBgYHBgUIBwcHCQkICgwUDQwLCwwZEhMPFB0aHx4dGhwcICQuJyAiLCMcHCg3KSwwMTQ0NB8nOT04MjwuMzQy/9sAQwEJCQkMCwwYDQ0YMiEcITIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIy/8AAEQgAfQEAAwEhAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A4Ta2eCaeqv6mt0Ykqhx3NTLv9TVXJJkL/wB41IN/940wJVaQD7xqVWf+8aYiQFz/ABGky+fvGgQ4GT+8acPM/vGmA8eYR940h3j+I0Bcb+8z940m2T+8aAF/eZ+8aXEv940AL+8/vGjEn940AGJP7xpCJP7xoAYRJ/eNRt5mfvGgCNvM/vGo23/3jSGMO/8AvGo2D+ppARMH9TULK/qaQyNlf1NQsGz1pDLixgmp1iB6CkUSGLaOakSPPamIlEYHUUuwUxEgQUEY5oEOWplQdTTuA7igY7UXCwuw9qQIQehpisSIuWwRU3k/nVEvcwfCU13f6ZLJfLiVLmRRznjOf0JI/Cui+z0o6octyMw4OMVIIMjgUxDvs/HIphhAoAgaNarOPm46UmNB5WRmmGIGkBG0QFQvgCgERFQRmozGKQyB1Aquy8/jSY0X44eeTVpEUDipLFfFIMDpTEKTxTd/NAD1kzxVhVynTrTENKENgU5SR1oAl+Q9TT42UcDmgCZioXHeoXmCHBNAWHRPvfOce9SyzbULMwTg/MRkLwTk+3FNy5Y3JteVjF8O2ltoVy2mwztOs8rMGKEFWXKtnIHGUx9a6xVHelRlzRHUVpEToN+RT84TFWQRk1DIcmlcCtICagK0ixR0xSHbSCxE4GKqykA0BYh3ADrUbyADg0rhYrtJUDyDNK47GihNSDI6mgobJJtGc1Ck+5+9Ai0pJFMKNkgd6AJ4IsHnmr/G0etMCKRu9RbzmgQeZQrM5wvA9aQx7SiJfvbm71XkllkORz+FMRYt5H249K6Lw9YS6pMU8kvEAVkbsuQaU5WgwgryRc1nRW01/tEduzRszs8nB8vczOfwy1ZqsCM5qaEvdsVWXvXJARik61tcysIw4qu2KQ7FaU7aqPKfSkUR+dzinb8CkBC0w5qrPJxkUrgVSxI61CzGgZETmomHPJ70gNCKRm6nipGl296BkbZf7zU6IRdMgsO1AE4mCjGaFlXrmmBMtyB3qQXXvQIQzbjyajeYL9KAIjeKF5YH2p8d2NnvTAerBzn1qZcA5oJOp8N+G49Rxe30nlWe7CrnBlIBJx7cH8jXa21xploiQ2kICb4htRD1foTx+OawqSu7G8EkrkTazaiMF4pVBWbJKH/lkxDZ47849RWPfWmmagpeykjin4wOgfK7xx7rzn2NRCTi7jklJHNu7I5UjaVOCD2oEvvXZc50SGQYqrLJjvSuMqySZWqMjHPXFICsZdvfFI1wAv3qTGirJccdartdn1pDIzccdajaYHvQBG049aiabnrQBZF9heMCmfbWOfmBNADRMzHqfzqaORgeOnrQBKJv7x5pvmndweKAHNcbFzioxft0UUATLcsF3OTSfbTLlei0AREEHr1qSOQqeTTQi3FPitCyBvLyG2Q8yOFz6ZPWhvQLXPXlTTkEUMau8cY2RiNchQFI+8cDOGbkZ602TWLKIqHWKLI3N592FZemOAOvt7VwuV2daVin/btgdg/0IEg7tt6flz16jk8mqc1xZXQR/ImXOMbSsw+VSv8ACc8hiM0kwaOd1a5g8yOVJFdnX94R3b1wenXp7VmG7B6V2wleKOaSsyOS9AHWojecZzVXJsQveAL8x61nXN7huKLjKb3ZY0wznHWkBFJMSKrtIfWgCMyn1phlPrSAYZT60wyHPWgB5fceOKA2OjUAOV3ByDT/ALTMOlMCVL1sYkWpBeIikhaBDftmf9YufpVmJ7fbuJ/CgCRpoHAAz+VJ5OeVFMB6ZXAIzipJEGAQMUAQ+ZtNdb4StpJklniwq4IeZl3bRnB2jp36nP0NY1naJpTWp2dtaW897bQXPnTvNNNAzStuCsisSQpypGQAOBViK3SO60ONbCIR3XnC4ATGxVViMYx1IXqDXOorqb3MweZJZ6W01lGz3GsGzkyGwItzANyfvYA56e1ZzadZ3ZY/ZRG51hrBGQBSF25DkgA9xxmjlXQVzmtXtb6C3+028rzw/P8AJJyQFkKdeo59SfwrKtr77TCsoJCnse1b0X0Mqi6hLdAfxZqu9/xgcVsZldr3OOvFQvcFupoAaJQOtMaegCJp88ZphkoAbvppagBm6jNIZOI0XuaXyVJzupiHiMDvxTgAP4xigRIFjI55pwgjYDr+VOwEotFPJJp4tYwM807CJEtdxGM4qwYXK7TQA9IXVccE9qnWDcuCcmgCt/Z00syxRIWdzhQBya9S8MWlvpfh+PTbtw1yzM0scCmRuTnt7Cues9LG1Pe5uRXtraYmWz2skjyCSeaOPDPndwST39Khl8WWkFwtubnR0mQEoj3h3KMZOMLxxzWBsc5B4/j/ALXuYZJ9FmskkWW2kSdgI2K5OTt55yQcCtBvEFvIV/0O2kzKLpTb3Uf3/wC/zjPSm12BqxmS32mIFLrNbIA4xNGdh3PvPzDI65/OvOdVhfT7h9ip9nkYmNkIKkE1dJ2ZlU2Mp5ieaiaQ4roMhm803fzQA7cCOtV5JCHIzQBH5hz1oDknrQA4HNOoAQkUm8UDNQeWfvLiniKEjriqIHfZYjyWOKURwJ/CTTAmQRdlIqwDGBgDP4UCJAEPtRsjJA3EUwHi3b+CUU4W8vZwfxoAd9nuCMYP5VPb206kZBwKALEklzalZYYTJtVmYA4JAUnr2HFW4hr9/qNlaveG0tjqogMVuu0PGFDH8eozXJV+I6KfwlZ/Attc+EtWubq4uJ5EUX0bPISRhT8v05/lW3ceBtJsfiFpKpCCk+mukinkErbumcduFFZ3ZrZHK3PhuwXwCzeSA82tW0BYdQoibv8A8Dram8BWJ8amOMERWWm24VAfvFo2XJ9+M0czE0c5Z+H9TsU0i3g1G4VpdUltZ23Egr5UTrwfq351gXM2omytZ54VCzKjuyDC/MzgZHY/IeauLTZEloMIymQ2aiLEda6DEYZKPMGKAImkPaoi+TQA0tzQHxQApmqRXJ70gB5AKi35PFAzoUAJ5qeNAxAA/SrIJEKcEDg1OFRuw/EUwJBBxwo/CmtC4GdvH0oEAQ+nNSCE4zTAljiJyDU0cZBoAtIj46nPYVbt4LiReQRQI2NO09mt78SAnfayR/8AfQxWzBpskmp2MsceY4r2WZj6DZtFcdb4jqpfCaUHhm7l8N3OnOjK89oLcuF6fKoJ/Q1fv9ExrEGsXDpGttbvGpkcLjKuCf8Ax6s7M0ujlx4XtdT8P/2XZ38MxS/jvAySA8ou3H6VsyaPcw+IptSMExWW3hhZQmcGPd/Pd+lLULo5WWxltpLEzIVaPVkuWBGNqeWiEn/vk1galp6N4bukXB2wIMDtskkP/s1VHdEy2PP2hdOKgZT3rrOcjOaAh70ANK0wpQA0xmmEGgBhzSh8DFIB0eZGKjrtJ/IZqLeaBnocWjfa8m0xKB12mrMPhy/DZ+zScDjjvWliNSRfDd+B/wAekgAHpTv7JaBd8wCL0yWFPQWps6boccoLPcQog65cVsf2HpnklWuoST/tCk5IaiytL4dsF5WaM/8AAxVc6HaMCY7uHjqCwp3QWZSlsre3j8x5o/LI+8DU1nYw3MC3FuVljY4BDY5qVOLDkZYhtd2SbeTC5z8vpWhbxxkMFikUKAWJXoDQ6sR+zkatsNPtGEkz3E6kYEKJtDH1JzUd94+tLCRUgmigx8vkQqJHLds1yyfM7nRFcqsQQ+K/F+sHbYW4tYWOBLcoA2PXAptx4eaWeD+2NUm1C8YpuWRsJtzjGBxzS2Q0LquiWUUEWLd7WcSogaI7OGI6EenNTfaPF+kxt9hvlvohjEdwuWA9jRHVA9GUG8a38haz1G1FjcPwGniHlE/WqOoQaZrMzWkTPbSzLgT2uHjbPYiktNQZyGqeC722Yi0l+2AAs21CpUfjWI3h3VfLaT7JJsU4JI6V0KaaMXBkVzol/ZwpNcWrrG5KqcdTUsXh69uovMjVAo/vNinzK1xWdzJu7aW1naKRfmXrjpVfnPQ/lTuFiwiKSMjrT5bVFQHjJoJKDoM4AqFkAoGJDKIbiN2GVVhkeo7/AKUydTDcyRE5KMV/KkM6S11K5idlUhSDgkCtu31i9Cg7yfrQpMdkW11nVGliitI/Pd2wUZscetW3/t6dAk2jW7gNkZlOKiTb3KikizGdfVBGdFtBGDnAmP4VIg8QSD5tFtODx+9NTcqxbQeJD10my/7+GlFv4iEp26RYgnqfMNF2FkSPa+IpEQPoun/IMYLmoZ4/EiQwxvBY6ZAJPmmRug+hqRkUVzMyOI/GUDCMZcAIdo/OgagfLe4XxjGY1OCwVNo/WgZn6jqrSWGT4tj2SAgNtQZ+lZqap4WtL6O3+0XAuiFUyKDncfehAzXg8TeHWvza/wBq33mjK7QzdRT4fFPhTUHljGp3x8tTI7Hd0HfP40mguKnifwrd2txcDV78xwYLb93Gen60L4t8NLpTXMer34XzNm4luvXGPpTsK5Wu9d8KXFnBPeateSI5OwEsTke1ZV5PbRa3bPpGtrHbSwq8aSYyWJPIz+FAHSWN3O26NvE1ssnVkAUt/OpIriSVZxH4ptWUct8qkL+tAFO91DVo4YJrDU7bVVSQAxptGR9a0LO411ocjRYArnJXzsUWC4y5tdSuZ2km8O27SN1PmiopLG9lkLz+G4G6DJkHSnqIalleQl/K8OQ/MhUjzAagW1u4SSPDUe7BAPmCjULECWlxDOsg8MqrqcjDgiqesWf9omH+0dI+ywo+PNVgoAPrihNisiP/AIRLwqzgreyGPjPzc+9EvhTw1KfMN07OQFXDEdABz+VPmYuVHG2dwpG992WOTitq1jedSUZ8dK0Qja8PWn2q9uFM0ieUmMqcck4/xrpZY5NPZRawvdMzBSJGyEWoaVylsXp0FrL50cckzHA8vqF9eKsvbK1xC4ZlZl+5n5R+HrUjHaXG8izNNA0Z3lRlicj1qSJZYL6O3jhMsD5MkzsSQfai4yVw1rdJHHDJOsrne7HOz070y/0GzuVuDcGWVduAjOSBkY6fjS3A8WsNAi+z+JzGuVg2wwFu2X/wFJbeH2l8E3AVR9p/tHbux1VUHA/E0xD9U8KSpoOiJGqicrIZCB97c5x+gra1/RQ3xdsPIjQQm8tg4x6MoP6CgCv4c0lz8XWd0VoPtN0/tjZIRWZ4K0yQN4j8xAQNDutp9/lxRcBPDmmyv4I8Xbo8N5dsEz6iYE0+PSH/AOFUXDFB5y6wjA/7PlMP60AN1TR5G+H3h51Qeatzcox9jsIrR8U6Cq3PhbykAQWUaSe+1z/jQAln4ZEHxMkhZVNo1xIAvs2cD9azPDPh9rmPWYnAbNnKsfsynrj8KAOp+H/huKbw3cTSs6XBnB3KcYA4xXewxLp9tDGfMuNxwXYbiP1oemoeRLeeZY2wlhje7ZmHyu2do9qc1vwW81yJBwjHIX6UAUNLea5tJDLDJayByuGbLcHgg0kztHeRWpjZ1dCWuM8g0r6XHYZOzWssMRV5xITulJ5Wqms2s6aNeSQztNIsRdI35DEDIFNbiPN08X6mNKE6afbkiYxv8p44z0/z0q3P4vvormwzp9v9nuY0fdg9zjr2ximIx9OS3MWJDlyeBmtaO6gt48I4GMnGask6LwkNmnvMwBaaXOfUD/69asOoXhuG2xIYt+A2fWoZSLR1C5W6cRRqYx1yeauSzymVRHxIcKB6E0rjLsMk0ReOSUsUH3jUFnqF3JMFZRs3Y+lK4Irp4lCa9/ZYdTNjeI9pyR6k4rWubvbYzPnI3df8/ShDPM9Hj3eG9RkPJuL0Z9wMn+tX9O/0nw7aoqbd11OePY4z+lMRp3cW6bS4cfdEY/Pn+tVwBcfEmOQ9ReAj8P8A9VAEXhwhvFc1yygMouDwf9hh/Ws/w4q2lhr9zsB26JOcHv8Ad4pDKHgi+/tHwx4mtnhRCUgbKcZ/eVrfZtvgG6h25xeRv/46RTERIoufAem7l2hL6UY65+Va0dejWW08PyjHyxMv/j1CAsTRCLxVDcjqZY2P4gVU8OxRrrV4qLwZLhDx1ySKALvhJjFa3kB/hk3YrZv9X/suzE7tGkY4Z5M4FAEj6s0elLeHywMZJySAPWkstS+32S3ClSp5UrnBH40r6gKJZ1w7keWx4AHI+tVr68uIWUQojA8ksCf5UlK6G1qRXF9OsEbpEu5uoOTinW9408Y8xNpPBHancR539khtrnUrHA3BvNGf9k4z+RNOaG3fRoFRRm2kZMegPzfzzVAc/EpilXYBubg57VOYQ0hU9O+asg7KxnSz0+OGOWJvLQgfNySeTV6C9EIYtLCQWJADdP1rK7NLE9veL5wkMkIUgHBk5z9KlGpIG8xtrfPn74wcfU0rhYtHVIXhZlZVY/wlxz+RqDTJZ7eS7kub6CVZGJiUMPkHpRdhYgs7IJ4lk1mS4t8tEI1TPzD61Y1zUZV0iVLUefNjHlxnqSDzmi7HY5eP7Vp3hK1jis5Jr5pS8sGcbfxq7C82m6Pp0ENs877GaZRwI2Jyee/JNVfUViXWBqF7qdoukXAjEIWRpJFOMjjb09gayIrHxFaCTXJL+ISBWmUbeQcHGev5UJ6A1qS+F9bs1169lumdbaVZNknfnAHA6fLmrGkTW32DVrecsouLR7ZcYywYf/WFOwrlHwlB/ZNpqy3sbRG5iURhQCG2s5/hUeq//W6DUa+tm8K30GXN2zh4o+gYjpyeO5osBm2dvq2p6LBY2c0cIgJkkR8YDkgDtz8oPeorm28S/Z4hcXELxWEm4qo++vBIHFCYGzd6wRfWkkNvJKrqm9xkbMYHTFLDdGx8SPHDE8lvNL5huADhN3UYxU3GN0y9ktNfu7doZFtm4W4P3W46/wBKv67Gms+H7uxS5t98o+Qs/AOe9FwsWLQOvhldPnuYGmW38tmWQYJxjIqLw8JNL0OGzu54HmTOWjkyPwpXCxSlmv18UG5F3EdMKAeWZDuBx6dOtatxfAw7omj3AfLvb+dL0HYga9b7Lx5Xmhcj5xjd/hVeyvrn7IDeLClwWJYRSZXrxj8KYWOb1uN08QWl4oBWVtkgDdiMH+lV7e1uE1C6tXQ7ZoRgE/xqcj8wf0qrknEpdTYkcyEkdM1taGv2m8YzHfsAIB9c1TegktTuLu0jjs1dQV7nbx703SY0u9Fku8MjEcAsTipWwyTw+0OpS32YmT7M5jGZC27rz+lU9Vu00u4tIGjlmN0fvecV29Ow69aAOml02K3013DucN/eOcemah0RI9R0eW8USRMSVAMhfH4mgB/h8Q6lPdqUkT7M2zLSl93vg1X8X37+HdJe8to45Jd4QCTO38gaW7GZfiHxLcaVoOk3sNvC0t4AWD7sKMDpg0niPxJcaVqGl28METC62mRnLZAJA4wf8adgLE+p30fiRba1mWCMRZYbN24np16Y9qtTyXX9kiykumkjezlV8qMsQyqD+RNC0JuYtpoNpb26sNzErVqKwt342Y/E1VwNGGwhjj4HUYpVsbd9o2YzweaAI9v9ix3s1mdshhyCwBA5Hb8aoeI9Qv7G11JobgbWZVAaMEgcA8++aQM5+81yfSlsWjiR/tHLBieOnT862L/xBPaa7YaekSFLjG58kEZPbFFkO5bfWHTxnDoZhVo5EDGUk7smtSa0WJ7na7DYSQV4qQJNDCalpzzsZVJyoy4bGO/QVFpTC8nuUdpcQPs5YHd79BimBFfxm3eIedI3mHHRRjn/AHastp4EEgMzkjo21cj9MUAUrC3S6haRnfglQCFOMd+AKht7ZZLmVWZiIzggquD+QoAq67aW0FtHOYQ5DgYzjrTHtbeGW3TyyTKxG7ceMUgP/9kA/+Ex5Gh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRvclRvb2w+V2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NDwveG1wOkNyZWF0b3JUb29sPjx4bXA6Q3JlYXRlRGF0ZT4yMDIwLTA1LTE4VDE4OjE2OjAyPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwADAgIDAgIDAwMDBAMDBAUIBQUEBAUKBwcGCAwKDAwLCgsLDQ4SEA0OEQ4LCxAWEBETFBUVFQwPFxgWFBgSFBUU/9sAQwEDBAQFBAUJBQUJFA0LDRQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQU/8AAEQgB/AQJAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A+X9o+lCttpJlbdxUXzCvTOAsK471Isgqj8wbOc07c3binexNi95gp6yCs9d/rUilvWruIvhwKcsgzVDe1PWRqpMmyNBZBUySAVmbmxwaervVXJsaqyipVkFZKyOamWR2A5p3EaiyDrUnmCsxZGHfNSCRjQSaayipVmXvWWrOe+KeGY8ZpjNRZlqVJF9ayl3Z61KrsvencDXWRalWQLz1rIEzCpPOfHpRck1PtC+tP+0CshXfNSCR6dx2NT7QPWnC4HrWX5r+tO8xz3ouI1knH1q1b3Cs2KwhI/rUsMj7hzTFY3mlVWpVmFZLSuxOeMU1bhw2P61fQg2/OFPW4UVjxys3U1L5jDpxSuM1hOre1SLOox3rFWZzmnLK7d6VxG35ymmNIvriswTP60vmOaYjQWQetP8AMXb1rMJc+1KzPt60XGaJkGOtJ5gqisrsKZI707jNDz16ZpyzKvPWscyPu4NCyOKBmz9oFOFwPSsgSP60NM4piNj7QG4p3mj1rGWVzUnmOeppga32hV70vnrWR5j+tKsj+tAGys6444NOFwOMmsbzH9aXzH9aANxbpQcVK10u3OK59pH65p8ckjDrRcDYa4Uio/tArMLSKOtN3v60XEan2gUfaAOtZfmPRvc0Aav2hfWkNwo71l72o3v1oA0hOhPWlaZPWsvzHpjTPQBqNOPao/OWs0SPmk3vuxmgVjT84etJ5ynjNZjSOvvTDI/0pCsarTKo60LcLWUWfbnNIHegLGt5w7U5Zl65rJWR/rTw77cZplWNYTL605bhayFd/WneY/rQI1mmU0faFrIMknrSCR/WgDY89T3H5UvnL65rH86SjzZPWgZsNcJ2pPPFZPmv2pfMkoEa3nj1oEw9c1k+a9O8yTHFAzWNwKabgVlh5Ka0klAzV+0Ck+0KKyfMeje/XNAjXW4FKble9ZHmPR5jmi4Gx9oHrR9pFY/mPS73pXBmuLkUhnFZO5+tIZJPWi4jVadab9oHqKyvMko86Si4zTaYHuKb9oA71nNK9MaVzRcZqeePWmtMKy/Mf/IpPMf3pCNPzlprzL61mmR8VGZH6dKANIzL60z7QKzmkcd80wyPSuM0mmGKjaYd6zmkek8xvWi4y/5y01pBVBpHpnnOtK4WL7TCmmYVQ856ZJI9AF5pRjimGQetZ5d/Wms7+tIEaDSD1pvmDNZ/mvn0ppkbrQM0DIKY0gHeqPmtTGkZu9IZe8wetNMg9aoh29aRpG9aQF3zB60zzRVJnYdDUbSN1pXEXzIPWo3mC+9UjMwqKSVmoKRc84ZzUUkq1UMjUwu1ICy0wqIzDNV2kaomkPrSGWzKKY0gqoWbtTGZ/pQBaMgprMKqGR880xndqQFppBUZkWq5Z6Zuf6UhlhpBUbSDtVeRm9aj3N60FFksKjZxUDMy1E0jdKQFnIPejaKqozM4HSp+aQFuYfNURjJ71YmT5+lN21mbFcx7RSBe1WfLJ7UCCn6iIFjqRUqdYaeI6Yir5eOaeq7hgLVny8Cnxx7qpEldU7Yx71J5PFTiIntUiwE9BTJK6x9ulPVdo9amERBqRY+cHincRDGu49Km2YxUiwn0zUohLdRigLIiValVe9OEWO1PC9qYDVFP27u1SeURT1ipisR+XipVSnhakVecVQrdyNU9qeqZ7VIsdP2YoGRiOnhKeq05RTEM8v1p6rjGOKkWPNPEeKeghmTSfhUypS+XTuTYjjB3Zqxu+XpSKuO1PClu2Kd0Kw+NflFSIgqMAhcYqWPKnkZosSP2jHpSfhTtw7ijduIGMUxWFVd3QU5o6UHawA4qcgbeaYisq7e3FJIAy1MwByOlQ7efWkUiHy/m5pfLzjFTkZ7Yo20XKsReUQtIY81ZWMt/+uneUVp3QWKyx/hT1QfWrHljGaFTdTJIvJ4zSeWauCMdOtDQ7vamFyoseaULVkQ7e+aVbbd3/SgLlbaW7ZqaKM9CuKsrCq96cqqe9Ilsr+X7UrQ7hVtYu/an+TuHpTEZ/wBmHrSrDt7Zq8sPvTWioC7KbQ7u1IYzjGKt7R61E5254xSBFVoqhkjOOBVnnJOaYyN60FlXb3p4XPb9amWHHUU4R+1MCu0dN8r8aueTuPSnCHbzQBT8rPajyvarvl+1KsXt+lBJS8r2pfK9sVcMf4UwrQMreVQsWasMuFpUQ7ufSgZX8mjyaurDu/8A1Uv2fB45/CmBREWKXb6D9auiGnfZ89qQrlAR89KeIfarn2fbUZhPUGmF0V/J/wA4p3kjFTCM55NSGP5fWkK5WEe2k8nPU/pVhYy3GP0pVhPrQBRaE/Wk8k1o+Ue1Hk9zz+FA7mesPPNPWHmrghHpThCM9KVhFHye+P0o8n/OKvGHtR5JNAMomPjgGmmH1/lV/wAmk8mkIo+TSNDV/wAnb6UjR5HagCh5f400xD0q/wCTjrTTDxQMo+XTfLq7sHpTWjHagCmY6jaGrvl/jTNlAFBl7YqPyxVxot3tTPKoLKrL7Uwx+1XPKLcdKQ2+O/6UgKfl0xo8irjR7TTCtICmYaaYc1bZPam+X7UAVGhxUbRVf8vd0qJo6Qyl5VNZKu+WaY0P+cUDuU/LNMMZ9KueVTfKNAFQxmmtH7VcaM4ppipDuikye2KY0fHNXfJprQ4HrSsGhRaPNRNDV9o/amNHQUUfKpkibR0q6Y6Y0XtSEUDFu7YqMxVf8uomipAU2i20wr7Vc8umFPQVIyl5fPSkaP2xVvyz9KTy91ICi0eKaVq40dRtHQBRaPPamGPHarrR+lRtGfpTGU2jzUTR8+pq6Y6iePvSKRWSP5xU+wUip84q3tHrUgTXCfPUfl1cuI/3lIsPtWZqQKvoOacVPep/JOOBT0h9aAIViLdqkSCrKxcVLHCR1HFUBW+z5py222rgjpfJoEQRwgduanWKpFjP0qVY809RWKhgBPSjyPmq75VN8vJz0piZCsX4/hUqxnHSn+Xipo0yPSmBCIT6U8Q45IqysdPVR0IpiKYiJ47VKtufSrSx8j0qTy/mA/WncRTFuc9Kk+zFeSKurGVxjn8KmaPcMYouKxm+Xt7UbauPb45qPyu1VoBBtp6rUqw5qSOLb2pkjVTinhc1IqZNSpCPX9KAK/l4pyxnPSp/LFKI8dKVwsyJY80/y9vNTLH+FI1O4WI+PSnqw9KbtpcY69KonlDvTgnfFR+YBUiBmxzxTuFtB3epkcj8qYuO3WnK6nI/ClcLDXYs2OtG2nrF3zipAnHrQBEqU/yx61KsW7gcGpktyvJGaYEUcIYc8U/yVXkDd+NWfL+UcZpAyg/dwanmCzKvlMc8UCFl6irhZVGRQzLt9TTUhakG0LyTSMy/WnyLuFM8ur5ieUFINTqF6Z5pqQjrnPtTWzu4BouybDJ0YZ9KijU454qcbm4NDLgGkXbQfHMVXI/KnG8brVZaRsnjFHMLlJZ7xn4UbfpUImbbgmo2U/jSKp+n1ou7gWo5fMUjHPrT2jDD0qvDlTjrVjnpVk2EW3wNxORTPL+ap03bcE5FSrDnpzVJAVxCGHWj7P71aWMVIse40yWVFhIPNK0ORwKu+XTvLpC5igLc/wCRTlt8Zq8Y+KY2B0GaB8zM90xyelZllrWm6pfXtlaX9tdXlkwW5ghkDPCxzw46g8Hr6Ve1y8XStF1G9YhRa20s+4sBjYhbPJx2r49/Zo+JqeF/HlzZapLM1v4gZIdyAFRcl/kdh2BLMCR03ZwccYVKqpyjF9TanTc4yl2PsIx5AH9KVYfmq2sR+7g5/wDr4qSOA7smugyII7c8VP5OAPWryQjZ6Gm+X82MZpE6lLyc07ytvNXfJ3e1DQikIzGhLd8Unl889fWtBoePWmeRzTKKfk5o8urzQhVz1pPK9qAKgi/GnCHj/wCtVtYd3SpVt8daBlH7PR5PYVo+T6Ck8n/OKCTOEHPI/SnfZu/9KvmHvil8qgNTPaHBzSeTu4xWj5NH2ekBneQPSmtDxWkYcU0w+1AGcsJo8mtDyf8AOKPJoGZzQ1E0ftWn5XtionhoAzfJ5zTJI+PWtBoyKiaP2pDKHlnjvTWj7Yq/5W4+lRyR4agRniPGaa0QNWZCF71WMm0nHNSVZsb5Q7U1lPpUoZmAp6xsfvflQIpsh60zaavNH7Uwx5oAoGE/5FCwnP8A9arphPrTfLIoC5VMZ+tQvCauspppi3Uh3KPlU14SB61e8nbTSntigLlDyd3bFBgFXvLFNaOkO5R8mjyfarTLt7U3b7UDKnk9qa0NXCvtTCPagCi8OB1qFo6vS4XAqIr7ZpFIp+Timsm7tVllxTNtIZTaGo3jx1q60dRtHQBSZajMfpxVxo/amNH7YpAUzH+NJt9qtGP2ppjosBS8ukaP1q20NMZOKmwFMoPpULqKuPHVWQYzxSGitIvFQMozVpvfioXQlqktEC/6wVa2+1RpH84qz5Z/umgehduPv00fLz1p1wv7ymqCKzNSRctU8aUxI+/erMUZ70wHRxjPNP8AL605V96VT1oAVYx34qSOEPmkCng1atl+XpQBF9l9Kd5JXrV1Y+9L5fXC5piKvkjbnP6VD5YHvU1xmNgKZkZ9aoQ0R1PGoUc0IgaphHxQAm0Y9KVY/wA6lijB49qnjhAxg+9AEfl4XHtmmqlXPL3Y4o8nnPSgVxkcfIOam4wKhHyt60fep2EK3zdsDNCw714px6AU9MKOtUFl3IfLA4pyr7U5sZpAdtAh2w+lOVtvGKTzMUvHXvQA8cnpmnMMfw0kY6cVIy/hQBFzmk25NScDnrQuD14oEM2VWkmLMVBq2y/KccVUkUBuBigAWP5ferUX3RzVdGHAqX+IHPFAE7KNoIPNIqAZ4680xm3tjpUyL8vJzQA5PrVmNSy4AyahjjG7rV1Sm0Y4xTEMjjaNuRjtVraduSMCoVdWYk+nrStKTx2oCwSMexpI1HJPNNPNKrevFIYjqfTAp0ahsUrNuXBNR/d5B4p6gT+Sqnk/pTVxntUDTE0eZxRcCVsetG0VEp+Yk5NSLyeuBRcWgu30pjHjkVKB+NHllv4aYEKqKQx/hVlYdvJFKYxQFioI+mTxRIgPIqwVLDGOaTyTjOMfhVXI5Ssq7TnGKeWNSGMsD6D2pYYSzHIxxTuKw0ZwPWnqzL3xU4j29s1G0Jb2/CjmDl0HQ5kYYOKvxw7Qc88elZseY2xWlC+5QevtWyaMpaD/ACxxxUqwhhT4VD8Hg1IyjpiqMyvJEF96hZeOBVzjPvUkcAfn+dA0eG/tS3mtaX8I76XSiY4JJo4b+RcZ+zvlSPxcxj6E18O2081lPDcwuY5Y3DxuvVWUgg/yr9H/AI2eAbvx98M9Z0PT547e7uBG4aQZVhHIshX24Tj3HvX5/wDw18OnxZ8QPDukbBIt3fQxyKQCCm4F+O/yg8V4+Li/aLzPVw0lyM/QnwLrEniTwfoWsTqPtGoWEF1IFHAZkDPj/gRaujjhB7VDp+nWumWsdnZW8VnaQLsitoFVURRjAAAGBgjH41fjA9K9ZaKzPMbTd0N8njg05bXPNWFYMeF7VPHGNmelUSZ7Q7e1RtH7YrS8rc2OlIbfHXmgfQzfLz2pDFt5ArS8j0FNki2qeKBGU6jvxTVweKmkjyxOcCmrb980hixgL71YVAe2ajWI7uKnjQ0gE8n0GKb5ZzyKs7TUgj3DpTApbfanBR3GKvJZluSOKf8AYwO1ICn5OR0496TyP84rQEJ6YFDQ8elAGcYf84pvkirjR80hjpCKTQ4pvl596uMoqNqBlN4/aoSgq1I341VbqaAIZFAqMR7ualZc5oQBVyTigZAyVSusjp61dmlA4FUbjLN61LY0ihIS2Riodpz0q00ZJJphjOeRUGuw2Pt2NTRyF2Ix0qFl24NWbJV3E57UEtCsnr0phj9qvtGo6nmm+XnjrWhmUfL/ANmmOm0dKvtHtFVHUsakdrkAj3cHiho9vanlvapAw2jii4WsV2j5xjFMMIXnrV3aG5pjIPpTEUio9KjZQeMYq2UFQyYXPGaTGVvKzzmo2jK1KXIbjpTZJMr0/WpL1InXI5OKrSELU8kw29P1qnNz0qLlJEMrfN1piMW4zikfIOaan3valcosbfxpPLz2qRQGIA5NP27cirRJVZfbFR7R3qeZai2496AI3j9KjMfvVlVOeeBSMtAim0eDTGTirMi/hUD55pDIGqJsVJJzxUDZqWNEbtVeQe1WGWomXJNQUkV3Xd04ppWpmqJm44pFjFUBhVnA9arISzDIzVukImuF/edKYvHFWriPc9MSHJ6VmbD4xxxVqNd1MijAq1HHTQxhXqKIYyzjjvVuO3JbJ6VbitxkECmKxFHH/s4qysXTtUqw1Kq0BYjVaCo5xU/l+tNZQvagHsZtxb7myBUHlsrYIrW2hjyPeopFBamSUlUpzU8Z45pxjGOaTaOlMCaJhu9asKwHPSqiriphxQBOJh2p0shVePzqt1NKzfLyc80xLYVm3J+NN+7zilVc+1DccU7iF3UZNRH60u7dTugJC3vSbs96gd6FakItBanjw3aqquPWpkk29KYFpe1K7VCJD3pDIWPSkIfu7U5SM8dKhwzVPEp4GOKYEqxg9qrXcSjkD2q8FqrdYbn3pgVY4wq8nNSLwnTNSRw7l+YYFRTrtbAOFoAVf1qdG21T+jfpTwxXuaQF9ZOM0+OTvVDzqelxjjmi4i+retSbvlH1qnGd2OasKuPpQUiULnvij7vOaULuxzUnlhl60FWKnmEMcnFMaQ9+RV1o16bc1F9j3scN+FBNipvLdqmRDgE5xSNblW9TVuFk24xzQKwRw71GDVpLX1ojUKM4q0rDHWmi1FDFhVf4c0u0scKuKkVg1WI9vYYNMXKUWhOMsMCo9g/u1qSKCuDzVeSMKMDk0xW6lNF2tzyat+WkijAwarbTu9KVWKnriggs/ZU24C1H9mCfw0i3J6Z/WkaZvWgY8Rgfw0x4wvamfaCeCaGm3d6LgRNHubiprZvLZSfu59arthm64prBux59auLMpHUQ26sysozxSyQjcfWqejakzRlJOgGBU8l0vUHJNdF0YEflhXzjil3DIx1qJptx45p0eZDgDBx25NTcDzT9on4lTfDf4cy3NpF5l9qMosYHJ4iLqxLn/gKMPqRXxN/wsbUNL1myvLKOyjk0+VZbXyouI2XpzgZ56+uTX1d+2BqemL8PYfD20XevXlzFNaWscRkljVT878D5eDt9TvNfG95pV4mnqz2Esbl1UjyiGXaoXnjuT/nNePipP2mjPVw8Vyao/Rz4e+K08deCdG8QJD9nbULcSvCGyEfJDjOBkBg2OOldKkZK5964P4B+I9I8RfCfw+NKljxp9tHZXUKqVME6IN6suOCT82e+TzXpCx4X0NetB3inc8yWkmhIYiCM1ZIGAKjBwBUoXvWhA5V4z1pfL3deKci8Y61OsfTAoHcrfZztOODVN4nXIY5FbpizHjFZ15blPegZizQnccVJABtCkZqVmC5GOabCuGzjA9akRIsY3cDkVcWzG0E859qgh4YsRWjZsp+9zSAYtjvwMVKtksfLHj6Vc85VYY6VUuJzk45GaYDXkReBUfnJULSEk9qaW9/0pDJ2mHYc1Wdy3egtSL97pQFhP1pG9qkbHqBUbuF6dKAK8zdqrs5qWWSq0hpAMb61E1O6k81DIdvekA5l4zVW4lHQdc0kszL7/jVWTLcmpcjSMeoSE9feoywbn+tHTNQlSO9ZmyWgMwXtTetO203yzmmBG55xipbVeSaaynrViEAKaCHuPILc5pyyFRSKwPemnpQmTYR5C3eoyOKk470bRQ2NLQr+X6U1oyMfWrfl96ZtLVNx2ZDyvemlmzmpWjwcmo2wKrmDlIZJD3qrIxLZBq067uNtRNEF6g0uZlcpVZeOlRSKcdMVbaMY6c1GY88UrsfKUJPzqIqWzmrrRioJGHQVIFCRe3So1XPerTqOccmmKhHWkGo1GMbCrW4N/OqrrnpUi8LweatEjZmy3AqLOKkYe1RlTVXAcrbqG4puNvOaYzZ4pXFYRzVd8UsjVCzVLY7DJB3qJkqVm28mmGRWqbjSIWFQuKncjtzUBzu9KVyiGWMj8aiaPYOTU8rd81Wlk3ZxUlWGqwDAYqxzVFWIYVPupXHynQTwHzM9aWOM9hirdwo8zpUsKDsOaDYhhtePU/SrkNuPSnqoqVflHFAhVi9anVfwqFXPXNTRtnqaAJQMe9KFoDD1p25aACmSL6cmnE7ulRs1MRDI3vUe+lkYYyRUSsGPFMCXbup6xY5pExUnnBaAIeY25HFLv3HpSuyv3ptAEqsMYxTWGD1pVx260vBagA3cUxnHU09x2AqHkZAFMQgkD8UsjeXxUa/LnJ/SoZpB90ZA9aQhxkLfw8fWlVsimw4VSCak/dqPl9aBMcrn0qVJDnpiq8jBV4PNNjkO7k0EmjuI71IrZql5hI9akjY59KYi4pNWIs9c1Vib5sdeOtaNvHvUE1Qhw3FSSOPSoSqu1WXz90cCo1tj5mAeOtMBNp444qGaENnPGKvrFxj9aiuE4/CkBnCMfShofTmpV+8c0/y9zAD86RZB5BUZIwPahU44ODmrclvhcZ4quEPSgCxG4UAHFThge1Utp+lTRkL3z7Uxl1McVOhHTNUFk9sVKJufSgC75YbvTlhC8nmqYudtPW8z3pgTTLlenPrVNV2v6VI10O5qs8wZuDSFoakbrtxnNSKwVetZkMhxu3Z9qsw5mAxxTGX4cZq4iY5AqtDDtAyanaTbgdRRcY+Tlc1TluF/GpZLgbSFIHtnNZ7ZaQ5NMRKzk89BUTMW4BzUgYjgDNVbyRoV3dBmgBWYqRS793VsVlyX3QE8VE15hhzx60hGrhtx9PWhty96of2lnC5zSm6Ld6CGrF5GLMAa0bS1EzfN92se1k3SbmbgVu2Mx28j5T71rDzMpbD932fciLn/AGqTf5jHJ/CpJmWSTAG0Y9ah8vnIrUyJlA7Dn61p6dppvNxeeC2tkUySTXDhUVQRlieyg4y2QBnkis2FdzDOMe+cfjjt6+1cR4Bhv/H3irVL3WvGNt4X8N+H57m3vrOYLExuCSsI3sDuYqQRtXKBwFPzE1wYzESw8LxWrOvC0FWnZ7Ir6X4J+E914l1i/wBa8dzeNtckR7i7+wypDbwx5ACCUlI+4AVZmJ6+4oP4Z+D3iSND/wAIN4s0qyudzpqOpRSWlsoAzlppLwIoxjGTgnGOteqeGv2gvC8fjqx+Afhv4atp2pTQuEvpWNkZZ0jaYuVCb13BGbcWOcj1rl/hv+2B4z+OfijxR8P28J6PZ2OlWdzcp9leeGZorZgJAZA3Lfd7AHuK+ZdSrLW57qp01pY8g+H9r8PvAvxIOpeEPGk1qfmtr/QtSOx7hBuUBGcBGIYAhld8gYGSa+ktG1ex1y3aWyuBOI28uSPBV42wOHU8qcevrxmvBYPjx4S+Mng/VtTbwkvgM6bcJanxDDO0nlRSH5d7qqlGYqARhw3IIOa5X9nyTVvC/wAbLPw3FrA16wNhNLPNDgxLaDJiwwOSA5AAYfLk7eG59XB4mcZezktDgxWHjJc63PrUwjA4wc4qaOIHrUm3qCQWzyR+X9KbJIFGBya+jPCHhRxU6R9OarQ/Nz0qz5m3jGaLgObK++arXXK+lSNccYxVaRjI3JxRcepUkti3OM1Cy7eP0q67N0HNQNH3IqBpBH93GKljyrDApkfyn1qZRg0DsSlc9OBUUxHGOKeX9qgkbvQFiNqbu4zSHnvTf1HrU3K6DiaSimFj25qbgLuqKQ8U5j61CxPrTuBDJUJ61M/NQstTcaI29qgk+XnGashC1MaP2pcxaRnspY0xlNXGXB9KiZQfapNSoy89KhZfarUny+9R0AQKvtS7al6dqRvYUgIGX2zTloPXkYpQ22gA28Uqtx6UbhRuDUxW6jlUt2yKe2BjA5pisV6GneYNp45+tSMVm46Uh+7wKiMme9N8w9KQD2BYen41XZeTk4p5c+tRMx+tAxVG5femvlabG5z6UkjHnNMZA7GoJGNTNUEjcUhFWVzj1qjM7Z6cVblY+lVXOWqRiKflzRu/GmbttJ5n4UCsPPHOKXAxnvUe8Dvmmmb/ADmncjlfQkzimlhULXAweP1qDzuT3/GkPlLTScYqvJJiomm98VC8340XKSFkfNQM+KSSTd7VCzVNyyRpDTPNPeoWk3D0pjN70gJ2l4qFpPSomkP1qNpB24ouMkeSqskn5UPJVdpPekA5XzIKsVTDfMD71N5lIDurkDzOtMViO9MuJP3opqtnNUaFyOSpBJng/wA6rR5qZaAuTEjPWpFfC4zVYsBSeZ2FMLlzzPU5pwkqmshHNPWU96BFpXOaRn4PNRF9tMLZzTEK7Z61GuOopkhLcDimK2EIzg0AW1b5c5pjTelVPtBTPNJJdfLzyetK4ic3BbvxUsM+Tg1Q5YA9aliU7ueKANDeN3WhZPm61AzbQKRTlqLiNBZAeo/WmyYxmo1YbRSs2V4AqhlSZirdai+0DkDBNOuz82MdqoLG4Y+nrUiLPMjAmpjL5KjtSQgeXhTlvpVS9YmQZ6AUxD5Lrc3XilSb5unH1qsse4A96tQx4xQBZRjgEVPHvZgoNOto17jtWla26hgaZLH2FmW5Zv0rXjh29PSmW6r06VbC9hxVDWhVkTBBPX0p0f3sDmrGwclhn3qMFI+nNAWQ8xkMMCoJ7dmBxVqOQNxmlZkkVuaYWMKSMq2Kl3qqjnmluyd+B0FV1wTzUisWtxZcdah27eaN2OM8UwybuKAZJ+GaTZ+FN3AU4NSAcq7aU/Wmbs8ZpeKQBnd0GKCGXuaRSOoNJK7fhQUgb60mDuBFIuGXk4NSqy9jQKxNGvAP6VYjuFjxzzWc90q5G78KqSXpU5H86d2B0S6kOufah78PnniuXkvpWk+XpjmrtnJNMwxyvekM1YpzJMOeKsSHnjg1UJMbLgZxUizDcdy/rVXAvQqQuSfxqtfKJo2Umo31JY1OD+FU7jUAwzuGD79KWoEFxZlY8dT1zWdskwe31NS3WrKrbd+Ris1tU2uTjI96kC4u5MZIPPatjTykigOO9YC3wbGAM1fs7otweRmto7mUtUdJ9jiYDaKuW8PlqBnism1nYjAbgd6tLeFepyBW1zCzNMY7HmpNoxyeawF1A+c2DxjrWtp0/nIdx3GmndhYvx25Vc9vUdR9K5j4nfDO38U/DDx1fJCsM2k6X/akLQoql7lZUCl8D5vl3Yzn8eMder7QM8rXSaPCt38OfiGjDIbToY2z0IM6g/pXFjoqVB36WOjBtqsjP03wDprf8FHtb11bZFvrPTrSYSZ+6ZbO4jYgdAcQjn3NcV+zVpf2f9rP4/WiMv2fTtKl+yxZO2IyhWfaO248n1OK+iLXS4E/a912/EQW5msrWNpDwCqQ3OByeoLGvIfgp4bvfCf7R/xy8U6nGsGia3pW+yuFPmeYItkcnyrkjDHFfNKz/r0PffQ+avDvgGz0T9kn46aRbRqzr4g8PxB5BlwJHgbGc+sjfrXsnwz+Ftv8NdS8TeXCoMt4sFtMSS5tUjQqvPRdzPx/9ar3wt0e1vPgz8YhPEkgk1nS5HU8/NHawFM+mCua7bXjjU5gBhSBj3+UH+tengFerd/1sefjHalZFXzm69++KN24571WztPTNSI9fRXPEUS0smMEcGlMxJ5qFWp33qB2RJw3eo93zetLt9KVU55FTcpBtIbrSMucDNS8Ggr6DNPQCHy8MKc1PZe+KbSugGUxl96lIpNvNS2CK7L6Gjb2AxUzr8vAqNOWOelSXyibfWm7QueKnK8dM1EV68UC5WVnB3VA30q2/B6VVelcOVkDLu9qUJipNu7pQR2NBaRC3zHjioZGPTvVhlx3qpIxznpUlkMm7vUDZqd+nWom5oAjZTjpmmFakY/LkGoy3c8UgGMuaikJWntMM9KhkYN3pAMYkmjnHIyKiZvm64o8w+uaQEu4Dt+tN3dO1RebR5vvQMsbvlqLzGb6UiyBlo6d6AHAZHNLt9KFK7c5pDIO1A7MUKT1qJhTvMyOeKa0q45pAR7fSmSZ60NcDoBTGkP1oAjLHPrUMhPpUretV5JM5FAFeQc1TlU1akPXBqnMxFSMgdtuc0wTDd1qOaTtVVpBuqbjsXWlzUTyVX87b3pu4tyDTAfJIcVD5hBpJH461XZvekMmaYnjH61EZjUXfrTGPNAEpkz3pjNjvUbNt96jaTIxjFSA5nyab5nbFR5pjNigB7OfpUEkgFI7eh71BJnoTQMc0oqFmP4VG3rSFj07UDFWQ7xVjeaqJlZMnmrlAjsLiTcwIpUY8c0PEV46+9PhhJIJ6UzQsRsdvWnrIW4HJpNvYVJFDt5PWmA07u1SqrY5qQetKuMmmIYoLU9U6E0vFJ5gX3oAlZQKjZgoOOtMaQ+uKTAZSScUCI5W29O9VmkGDUs7BcVmTXG1m5qRD5rhdpw2TULXPQ7uelUJ5OuKrK5ZgOcZpDOht5Dt3FsD2qzFcBjw2RWPHJ5a4U4GKsW8hbvxTuxGxv3gc5qxGo2A9DVO3O0A9atBt3QfhQgJVp4bHGaQRtjINCxM2O1ULoMnUOclf1qhMF57VqyRlVqnLCHIOO9IRFaAiM1BOjSSE/hV5Y/L+WpI7QNyTkUwKUUB2jjNXYbU1ajt1UcDmplTp2pgV0gZWrSgQqvPFMRQatxqNuDTF1J4Oa0I/mA6VRhwOKtxsMcVQyST5V5qpJnooxU7yFuKaCByRmgCJWPQ0Z2ZwetLI3oKgZs0ANkw1VG+9U5OCc1Xkx60hX1GtJ81RlznikbPao2+XnrUgS+Yf8mjzD6/rUPXtilpDJd23nNO8wsDzUBz24pVB9aAJBIQvJp0dweV61DJ8vI5pi8t97FAFhpGx171HJMV4zUbSeXnJ/WoRcAg0APZt+cUkab+Dmo08yZhsGea27O1CAOw59KAWpDHpL7VIxg960rexNuByMU8ShFz/OoZNQUZyRj2pjsyxNMsa4Xmsu4vGLGmSXwbIU5NZl1csWxQIlkmfdkVRk81mPJ5qTzWOKfyWBNBLZnzQOmSck+tVWb5sE5rdmxJGRjmqEemmbLAfN9KqxJFHkYOMAdTV+2kEffjsag+ztDkEEjHPFOtgdwHQZ7igN9DYspJFf73yt1rWjuFVSijPrk1mWsQkYFTWgtrtUfNlietX0IsQlt7FlGF9K0dLuPL4A561Va3VVO5/mHoKWC5EX3Rk+nrVJg1dHTJcl1AC5HrXonwxuNL/s3XbHXIp3stUiiiihtW/fTFZN5AAB4yMZGT7VxvgzwxdeNNQis7NGyWwGC5yR1xzjt1JxzXtX7P3w91XwpYyX62zahrFzITJeaguDbpnIjRFJwB6kjOK8vH4lcvso6t/gd2EoPm9rLY7fS7DX7jXL/XtK8JQ2eoagqLNe6lMQ7IoIRVBJKgAn+AZyaxG8A+M9C1nUdd0zTtIOp3w2zP5+4MuckbTHtAJ5OPSu+vvAWvX0enTHxHqkN5Hc+bL9nuvLjZdrgqVwVK5KnGCRtHPWk1TwTrV3aSQ/8ACQ6hGWUoxjuwDz/wDjjuK8HlfmevdHzN47mv/B2m+IodZ8CfY7LW50udSutJZh5kiKFDfIWA4A/gGcVxVr460jxrf3dxpc4YpgPBJgSJgAc8e1fRvir4beJLG6tm0bWrya2MUkdzb3p+0xyHK7M7m3AgBhuHr0r5f8QfAvWPDvxEk8X2OmTQ3EMDi4sLOVUguQ7KmArLu3ZYHHQ4611YWt7CpeWxz4ij7aDS3Oh2jPUZ9qkVR681jaD4isvEOnxXdk4eNlUbdwzG3QowzwwxWkrMwyoJ9favrFJNXjsfO8rWjLcYp59arxyY4IxUvmBhgUrhysVX59Kkz75qsX209JAccd6BcrLarTtuOaajDGKVnC80FWtuRF/mwelHFMdt3ApvK9aQEvA7ZpGxtyBTGG4DFOVGpFWBfmU8mm+UV6Gp9vfFNPHbFK5YzpTGUN3qVhmmMpA9aLgVJDsb1qPbnnNOulLcjjmoNxU8ikIlKgVCzBeozTjJ3qCTLH71BSiErDp0qs+PWp2X8ahb6UGvQqzA9jVSZyq1ambtVG4+7+NIlrqR+dtBy2PxqD7Zjoc1DMpJPeo9ny+9Imw+a5z34qHzcng1HIoA65NRcjmkMsmQ/wCTSb8d8VXLmmNNt5pBYn849Qfzpv2g+oqtJNnvUPmnd0/WgpGokhZeSKMselVYmOKsxuduaQWJArbQM04sPxqs85zgHFLkL1bJxU3DUmMmORUE03HXv6VE0ncmqlxKFHXvQBaM3qaaZdw6+9VI5D1/nQ0x6UXB6k7Sce9QM+7vUUkvy1FvxmlcBZZMVSnk681NI27rVWdSynHNSMpTSFulVS3zHNPmZlY0zIbPrTAcvzVMq8ZHpTYVA5NO3belICtPn6VV3e+atyYbqaqOvXFACbqa3Hek/Gkdsn0pjEaSo2f/ADmkZvemE0AO+9Sbc9aF6+tO570gI3j3fWoXjPpVmo2oArGHIxio2jK1ZdsVA8mKBkaR7pBnire2qizDeO9WPOH+TSA7eaQb8dBT42GMGsqW4JmyTirC3Y28GmizTEiqOvNOEw781k/ajng1ZhmZ8Zo1EXlm46U9W75xUO4bfWo2lGOtAidpNvemb9x65qDluvSpFYLT1Al6rnPNRzXAQc8VBNdBeBxVOS68zgHikMdcXinvWY1wWdqkkZmbjmoWX5iSMe1MQoPmZzxR5JVuFp0MZZvu5FW/KZcfLntSAqxhs96vW+FbpzU9tZ55xVlrLHPSgQ+A+YABxV2GPawJOaqRp5Y4HtVlWJA5oAvqRtpUcdhVQzHp/WkVm29aoCaeYZwORVRpPw9s0snC1AvqTmkMs7i3OcVPC/zdarqoYYqXbtGc0ybF1WqVfm6mqCyHtU8ch70DLsfBq2jcVRjlHSnibHfj61VyTQV6lSQ1mi6FSrcBqCtC+smGJ7elM8zLH0qr9oApVuFbtRqSWNwPeon4Ge/pTGkXA5xzUE03JFABJJ19agZt3Oaa0lNzjjrRckdmjYGph9c0gkxSHYcy00sF6daa0nqarMx3deKBl5WLLmnL15qiLjy+KX7co9x7nFAF2QKy8daqSKy+9RR3YkbhsVYX3bFMCFrcyMCM46U+O32ttzgZ60SXix5Cjt61HFc+Yw5xQLqbMKrAAB6dcVOJ88Vnxs7cEY96lxs5ZqYyeSTrznisqab5zzipribcp28Gs9vm6nmgG7EjSDnnNRcnk8mjy/Q1NHH2P50WIuCr8oOKlZRtqRVXHpSMo7GnYQ2NQ3bFW7dVX+HNRRx7V65qeE4596ZL7DnQjPAIPtVBrU+YM8ZNbSMhxkVDfRiRMoMGmNaEVivl5HXmrysC/wAjfpWTEWX5eSe9aNvDPcTQWtrE89zMwWOKNCzux/hAHU/SgduxMUbnhmXqcDJp+n6NqOu3ZtNHsbjULzoI4Iy4H+8VzgfWvf8A4c/ss3s0cF54xm+y7sSDSIHBkK9f3r9F4z8oyfevofQvC+m6HYraaZaW9hYL0W3UAsB/ExGST16159XFxj7sNWddPDSlrLQ4r4Y+A9L+GttBdSxyahqm3YJVUIqFhlgozx3/ACrurjxXeWNsix2kFuzt5UEGM8+5yOg56U/T9PSb/SnVVVgViUso2oO/U9cZ6Uiwi6158YItI1RQu9jvbqflHXpXjKLPV0IrzXtS0/R7maWcTzKhOVVQAegxj3Iqe1vL9oUikuGkk2AM7YyTj/69R+JID/ZYjKNiSeJMFGB5cHoW9qvLZuvzCGQ993kj/wCK47UcrDmXYwtP1aTUIVF3sUSfK2OCCM5+tU76xt9Qlm0y73WM+Qvm/fjcdVPbHbvWlZwvb3GoRhZAEu5cYhlZRk7gMhvf07UniS1jxYXhwmc28hk+Ttlfvqc9DRyhc+WPiF+yxrGi+IrnVPA92YbzzIften2ajMsQlVmzC2N3ybgGU5G7vXOXFvPpt09tPDLbSxjBinRkcegwRmvse8tH1jRFkt5AupaeN8E0cisSn8Snbknj27Vla3p2lfEnQ2GqWFvqF3bpueP5UnKDJ3QtgMrAHoRg/lXfh8R7FOMlocVaj7RqS3PkiSUbc7geex5/H0pVY9a9G8afA/UNL0v+2vD1w3iLRSvmEqB9pgXGcOo+9jByRzx0rzFZwMFGBBGQwPBHrXtQqRqLmizy5QcXaRaDN2/lUsbEcHmoYWZupzU2D061oQTGRsZzSLIW75FQtIc4K9O+aYtx83Tn60wsWelG6oGmBUUeZt9/xqSty0rVMr7feqHnc9P1qRZs/wD66BqLLMje9Jn3qISbjUi57Uh8qHikbkdcUm4hsdaGb2xQOyK0y4PrULR9zxU8rjcf8aqM2WPNA0hki/LxVc5yc1LI3oarSMU5PNIoVnxUTN15qFpCxqMtzyaVwElHJPWq0nJwasOw25qpLJ14pXJZWmULz1qnIxJ4q1I1UZmwTg4FTcBkpx2zUa8DB6VDI5X+Ko/NPOeaV9Bk8kygdMe+apyTbmI61HJM2eB+tReYXbGMd6BO5NuBOMYqRSO9Vd23k0vnc4pAjRWQKMdKX7YqjaRj3zWcZDTRKFOc5FItGopGdxOBSNKo6GqH2gY70hfPSpuMtSSBu9UZ5OcUO20ZzVSWYUwLKzHbgtkVHJcAVU87ng02S4LcdKQFj7QG46UecMdazjcFO9IbrPU0CsXmnHc1G0w5xVBrjB6003XHWgdiSZQ+Tmqedr9ac9wPWqclx+8yB+tMLGiHXg5prN3FZ3ntUn2jjn+dIdiV5MnFN3YB461A0hzmmGft0/GgVh7MByaiLBu9NZt3FRdOKLiHMaSo9wDGm7vejmAs7u9Nd/eq/mZ4FMaQ564pXAseZj3pjTde1V2l/wA5qNpPU0XHYmaTcOtQSN70zzAO9RtJmlcYu87hmp91U1bL1Pn3pCZ01xIWfGadCxH0qOb/AFlPh96ZZetxuOa0I+GqlbL8uat76YiR3xxTcBVyTSbtzU1m5xTEGdxqOSbbkfrUcsxXNU2m67jQMkaUsxwaOOAD+FNhIz049atrCoUNtoENW3HBxUctrvbOas7+MqcDpmk8lGXLPzQBTRth2fdP51r2cJkUZ5qrMiW6CTg4FN/thFKhDzj1oDobaxhF44NMLZznpWfHqAkAAbJ781YV9y5zmmIm8xcYxQJRVaRgvTmlVhtyeO1IZP5wZsDintMFxVJZF3nnFRyTBX+9TAuzT8VGjZ7VVM27pT1kxzmgDQjbipGk+X1qgsy4znNSeeNooAteYPXFSLLtqh54+lKJl/vUAaizY/8A11IsobqayftC+tO+1D1/WgDV8zbyDinfaayluc9/1p4uB60xGkbjHQ/rR9p4rO87dwDinCbb1NAWL/2jPehpqoNcD+9+lJ5271NAi95gPvS7s+1U45OelS7t3t+NAE5x61E7Y71E0m0etRM5agB0k/4e+ajW4D9OarzZbPNVPO8vOOKLjsXprwK3HX61W3PcsPmxz6VSe4TnceafaXSiUDdgUXHY3IxFaw5b5mAqjJqQlY9gPeoLjUooZMFt1Zt1eJJ/qumetHoKxqNfLjLNgdKsWU6NICGrnVmYcZz+FXrNisik9PWnclo6mXUgm0DIqCbUOcA7qzLi+DfKvOO9RecW61asBsLcb1xUYPzdaoJIR/8Arqwsh6/1p2M2XV+tTLnrVNWyBzVuNs8YpCJUb5c4p2aFjKqAaGXacdaYD1mG3pU8bAD1qBVX0qZdqjimHmS7jmpBIdvT8ahWQbvwNWrK3m1S7hsrWFri7uJFiigj5d3YgKo9yTSuWtS94Y8OX3i7XrXStHtZbvUro7Y4YgOfVix4VQOpNfaHwb+BGn/C+1+3XATU/ET/ACSXir8kXrHDuPygYGX4yQOlW/g98KNP+DPh2C2uZ7eTxbq0f+lSs439MmOMdSq8ZwOcZ47dZqepaonijS9L07S4J9MK/wCl3ZZWMC5IG2LdnBZepBHPWvExOJ53yQeh6dCgo2k9zW8ozFU3sfN+Z2Qg4Qd+wBJo1jK2fko+JJ2W3AEhcjPqq4HSvMfj9418J+FtHtLPxdrU2jwatqCWtt9ldhNMFO35VRTkBj6DJA5Fdp4u1y38DeHZtSu5GlttC0+4vJNv7syCIbRkc8k9641fojrbXct+FvGGieJrrUrPRb9bttLkFtcraiMIhwQMnJPZvyNYet+Lm8I6LNqraVqOrtdXrAQ2TuzBB1cqgOAAvfuQO9ec/sofGi4+NGh+IdVutBt9IlsdU+xo8UzyF1MJmZSTjJU4HpznvivLP2w/jv4p+FN94J03w1PZ2wubC41SZpLdZGaVZQIyMjpyc9M4rT2c3Lk6mXtIKPtN0fWPiHy7izsD+5RJLyE/NO2B94/MSMg+1Y2m+KmuvHN9o02hLaWUMYkg1KV1EUzA4K/fJBJ6ZHIB/HanupJo9HM+0tJe24kC4xuMQZuB05Y18LfssfHnx74o/a+8UeHtZ8Svqmi3SawRY+SoWIW0hWHD4zkAHoSOalRlJtroNyjG1+p9patqKaLca7dm1e9dGikW3t5nWWUtGmAqqDnml0nWl8UfD/8AtOCzvLItEtx9nndjPG6tllIcAg4B69a8c/bc8eeJPhz8CPHWv+GbsWOsQ2+lhJvLDsqSzrG+AQR90++MUz9g74naz8YvgBZ33iP7Jca5Be32h3NxbwLGJVijVkJCgA8NzjrRyv4ug+ZfCevWvjjSdK8Yafo93qflavdIZY7S5hjaRlwTgFDnOMnp0BoYTaD4muIbVm2RyebEsd2CxjYbiSj9uSOD69K+Tvib+1NdfDn9qT4eeCLzRIG0DVrOwb7ZFO0dxFNcu0Hm85yEcHjjg9a+iv2gta0vw14B1HXdbnvINJsbG4N41mm+ci3kGdpGNpO45IHTJqbSW5V03odLfXP/AAhviiO5jaRNE1hfOa2a4UMJD1AVu+dpwG79CM1518VPgn/bl5eXWhwiLW0T7S9pHGEhv42P+tiAztk/vL0JwQBV/wCEfijTvid+z/puq6PqH9oafFbC4trncbp22EpMjh1yWXoRgdB0q7oXiC/13w/dJdabBo/iHw5P59pGkvmM0G0M6lUcsmRng5wQOKunVlSldaGcqcZqzPmZA0EjpIjxyRsVdGGCpzjBHXPFSNNuwQa9v+Lng2x8e6GvjLw2kct4ULXtvZsHEmACRxyZFBz05GemK8F/hBB4PPB/z/nNfRUayrR5onjVKbpysyWSY9c1DubdmkweabkjnrWxkidXJ4NSI3NVfMI7U5ZcH1pXNEi4G5pd23tVYXGKXzy3BOKdyi9H1zU4l29v1qjHMBUwkz/+uoYbk/m5bJOKJJPl4NV2kx2qOSYbcZpCsPdveqcjnOMVJuz0NQTN8vHXNFxXI5JMdDzVSSTrnmppOO9UZpcMe9K7HqJJKe3X61EZGqNnBPNNZhjjrUjJt5YYzUErcEd6BIVqKV/xphYrTMRmqUnzEVbZvm5qBlHJzSGZ9x8tQhtw4q3cR7uT0qrwtICOYfLVYsBk5zVuTDoc8VmSfKxxQIsK3mfhTWbnpUMOWX0p7SBetBQ5myvXFNjb5sdqrtcDcaI5h1P5VIy75hbj9aSSYouM5qDzgveqk9xtyQaQyeWcspOaqG4H4+lVXuDyN1RK3zZzSGXGm4z0qBrjPt+NRzsOzVSkkw/FAizNNg1BJcFf/wBdVpJPmyarzTd/egC59oZjgfzpvnsvfFUPO28556UjT++aALrTnuc0zzAx61T8zPejzR60DLvmBRSeZ3zVPzN3emtNjvQBdaTPTn8aj8wZ61U+0Be/601rheo60AXGk29DUTTVVFxuppkHXNIRZZu9MZx64qu04x/9em+dSAstKFUdzUTTfhVZ5i3fiommH1oGiy0wz1pjSbh6VVaQUnmf5zVaDJzJimGf2/Wq7SVG0nvS0FoWlm+apvO9qzVlG6pfMFIDuDnzOelWoY+neqrfOwIPFXIZAqiqGXo8KOmKk3fWqS3HoaZNqAj/AIs0CNDzM1XuJwOhrLbVwWI3c4qEXwznPJ96B2NFt03INQLE0jNxjFQR6nuyoqNdS+VxnHNMRrpIlvGC5APXFJNqm1RsxyPWudubxnbh8j3qrJIzEHcfpmkFjf8A7U25AbnrSLqXmfecKKwkZjx2pJm2gUrsehu32rK0ewMfrVKFfMXKn5qoxzBsBjxmrC3BXgHApAakbtEqkZ681pWV4+f8aw4L0MuAcH1NTx3jLnnj2qkB0TTKzZZhmqtxMegbj0rHN2em7mpoZ9w5NMRO0zK33qRZmduDionXdwDTlTy1J64oKuWTNtHLU6O63A4OazJJgxIzzTBOI+maQbmq10UHXFL9uMi4B/pWSbr1pUucnB/nTEav2g+tOWf1P61m+cOxqaPnmgLF9bjbyDTxcHbn+tZ4b5hg1IWDDrwPegC6l11FEdz+865zWc83y4DcUtqD5gZn4oA2I7hjnjviphMU+9VBrpIj2P41HLqChsdfxoA0lmDN1qWS6RVHOfeue/tDc5G/FMN4egbPNCYrHRfa17GnLeDuc/jXP/aG6bs1NDKc8niqCxu+cG96A3XPTtWZHcfh+NTNN8v3+aLi0LcmIx83ccVlXUgh6nkn0qaTUFVduenqao3EwbuGDcikNFC6unVs8Y9apm8Y85wadeOq8Z3HNUWkHQCkMuyXBcA9+hyaVJm243VS8zdxTvNCr/8AXoJvqXklO7k1cjumbjO3isqOReuanWYdjVIk11uBgYH61YjkzWRHMTirUU2KYGsrcetTLIemMVnx3BwP8amWbcOTVXE0acbdKtRtjBBrKhl5xnFXIpPeq0IaNdbjcmCOfXNN3haqJIAKf5gqSdS55mRR5o/yaqiT5fSkZz60XKsXo5Du4z0/h/Ovpz9l74Y6lptxpXjO600XEl3ceRYLO4RLeDafOvMEgn5cqmAeWzxXgPwq8B3XxN8f6P4btzs+1yZnk/55QqN0jDjqFzj3I9a/QXQ7Gy0nxoNIsWWLSfDekRW2yTGTLO5IUtxyI4s+n74dK4MXWcY8kep2Yand8zMjw/4h0TxZ8XPFFvaWvm6r4Stra1e9DEJBNOsmIOThiEKsSBxuAya8M+AvxE134nftqfGa6OrzjwT4Jsk0PTtNjYpbeaXy7sv8Th7eXk9A2BwefR/2b/DOq+Cfh/4p8SeIJY5fEniPxJd+INSjjlWVbfIylsWUkfu4kjUnsc8HHM/wdsfCnhjwXreqeGLHTrXRdUvLq58/TnklkmkLkSyyOxJc7lKgbfl2/wC1ivH5ox0PSUZSseYfHT4X+JPij+0l8NSuj3EnhLQLS21O41RgPs7/AOkmaZQecufKjXbjJ3D3r2z4uaCnjLwV4m8OzX39kzappkdjHc+UJSkjsDtZAckMeCc4FYZjuJvik9++mjU/CtpaC4sbqdJjIt25RCdkjncAAxG2MAEit+7i1fxXpWtadFYXwsbyJYTcGKVbnep6qQydMLyW5PtS9s5JLsP2Ki5eZyv7Onw+074X/DW5tLHULjUI5bm4mnvru1Nv51wY/KCRKf4ERMA5O7ORXP8Axm+Evg7xprXhG/8AFHh6bVdVt7WG0srZtQjtVv1MqsE2ZJIU4JJxkZ4r0/SfBXiTw34Q0XQbcy6hHa28dvE+oA+Z8uMiRl39Rk7t3BAGOamvPg7qGutop1rydSfS5BLBPLdujxuvQrsQcA9MntS9pUb5luNU6fLyPY0NVinWbS7V2C6mb1bg7XGEIXAAbacAdMEZwDXjHgH4X+DfD3x41e78NeGdG0vxbNHdtqc1vqjvLYrJIDI0MbArmQkE4UYyenQ+u6t8NPEGpahFF/aaw2Ku0rOxYsclfl3hw27g/N6E8VPY/CGa11i61GSW2N1PEIvPiluBMVAH3mMmG5HoM45z2V530RVoN6nH/FTwfpXxH0fxJoN/pX9u6Jc6RFBeaetz9n8wI24Or4HKEBs8Dg1h/so+BfDfw98NzaR4Mglh8Mw6tLdS6g+qR3326d0QFt4YbAqkKRt9K7W4+F/iO61yS4bUYxCsCw7fNeHzDyMgoxIXBOVIznHPFR+HfhTqvg3RJbawjjAMrTNbpfSSRSkjHIZN3QDgelK89rOwWjv1PlL9o79mnTPit4q8I+K38R3XhzVNBVgbpNMkuYJrGC5M4ZWDDEiFnH+0Owr6N+L+mw/Ff4M6zbRBvsWuSXVjFIwyyx3NtJErsMZUBirHjKgE84rnvGnw98ZeKtLeCVtV0+yj1CW4h/s5CGKEFSSA8TgMHYbOR8ucnt1vjLxBe2/he6h1mya5WGETLEts7RybGUEyghsnDHK/N0z9H7SWl+guRdDwf/gm74R8W/Df4Z694L8caVc6LPZ+JZ7a1+1cLcxz2y7/ACiTh1Dxq2V4O/1zXN/s4eM9U8A/tvfFbwDqt1dT6Zexf8JBpiXrF9jHymmRCecbJJRtHA8k+9erfBm+GkeNNSuLzRX0bTrE+VpSwvJKJYzIzDzCHaPdyVGQrDG3p15z4iafo/hf49ad4ouLHRotfAuU0WWaeaO6H2kASwvglZAEmLpuVQCWXIyWFe1TvfqQ6bVrdDpfBt9beH/jV8RfhppljFZXtnHDrNktwX23LSA+VOWBA2mT92QMYDc5rzbxLo9y1rb6+dLbTLfUXkM1krK/2K4ViJIjtJAG4FgCc4Nd98VtKvPD37VPw28cWc9rbpeaHNpWqpcypC5hKsyygFuRHPFGGAJ/1owepqZvB9l4i8QfETwv5jiS31GHxNpIUhdsN5CWOcDLDzRcg5/uL0rsoVPZSUo7Pc5qsHUi4vc8ZPcH8DUeOoouo5LOaS3nHlzQu0boezDgj86YGHrX0FzyVGwNn8qAfejeD1pNy5wBSbQ9Rw+tG4g9aZ5gHXgVDNINvynNQMtrNt9qmS4x16fWsfzCOf61KJht5oKNb7UO3BqBpznOaz/OA7moZbzHei4jSa796jkuBjOcislrsHvio/tQ6E/rSvYLGpJMHXBOKrSbWHNVPtCtR9o285yPSlcomVUbPNMfavaoWuhn0qtJdBm60XAuEjtUM79qriYtjn9aWSUYouBBJIN3SoGkomI5INVJGI9qAGXNx/DmqMk/XBz+NRXk5zx1zVBpz3OKVx2NBLkNx/WoZXCnPaqK3Cqc55ps10W5LUXHYtvcBV4GKz7i4b1xzUc90wUDOe/FZ73BZiCe1IPQvLNu7077R83Wsv7QEXr+tM8/f3pCRsvd9garS3Q9c/jVAyHrTGb14pFMt+cAcjmhrgbSao5H96lkb5cA8/WlqGrJGuS1NaTAyTVYZXJLVDLN709A6Elxc+361WaXd3xUMk3Y8VE0w7Gj0JuWC23nOajafHT5ahabjrUDvu70BcuLcbuN2aPM7E1nq/ze9K0hNLqM0PNC9OajaUMM5rPabFNE3BycUgLrSg9/1pvmY96p+cB3ppmHrTAvecFWk+0ArnNZ5k96YzbeM0gL5kGOtMaTK9e9VFmGTn0pWmAHFAFnzeMUwv71WM5pvnA+1AFhnpPM96ptMOuaaZs9DQMtNKKjaX5c5qo0tMM3GKALPm/MKl86s4SfN1qXzKAO5/tDDKM8Z9atfbxt4bpXMLcHIbOT6VbgmLDlsUDNp74spw/NVJLlh3znvVXzkVT/ADqB7pWbg5FMCyZDuzSm58scVUa8VVOBUAvOeWzzQBr290RGTnk1X+0Hc2TxVb7Ru47U7cGXHSgZOtwF5PP40rTggHoKqEBevNMZuoBoJNOG4VuBxTXYs/IyKo23WrisynOc0DuWEjBXGKieQ7to+lOa6+Xb70qqH5HWn0AWGUr97pV9JDtyvPvVFozjpirFu21cE8UWEWPmbkj8KkSTZgHg1VaY7hg/hSTTYwcfrQM1VkyoI9cVKfu9aybe8GCO3rmp1uSV68UagSttjYnPNU5WYt60slwNwAOR61G8yr1oAY0meKsRsDjPFUdw3ZzxVmNgyigZdVcDOeKl87aoGcVQknIUAetRtM4pAa0jGOFiBkkdazl1DbIVLYGOeaPtzbPmPy4xWLOcyk9cnigVzXa+8z7h+XvzUn9oGOPG/OKwvMMffmo5Lgtzj9aNRmrNqzyHg+w5qIX0p53VmK/vipY2yeOaBGpHdMeR1+tWYbhs81nQg9avRxnGc546UAaEUx+8fpirsbnaW9Bms22A25fgVBqGqeXlIzj3qhXNWbUI44wS/PpWZceIiuUThvrWKdQO7BGT6k1Ex81sk80iWbFvqTzNtY/Ka0TufbzgY4rBt38lQQcnpWnb3QaMEnn1poasSXEPfGarNF14q+jeavPSiSEc7fmpMZQjUNntgZqNnXGMc1I6eTIRmmMUZumDQJ2GL6VNGTShF7CgMOh496dySzG3PWrKSdqoBh61NHJhhnmr9QNRW2gVOkwrP+0buMY/GnrJ+NAGnHKM1aS4rHWQ1OsnvRcVrmzFdfjVjz9yj/GsZH96sLNj/wDXTuFjT8/5aPOHUnHb86oC4GP/AK9L9q2qW6Acnv8A0p3HY+zv2DfCcFvZ+K/G19shjhA06C4mYKiKoEkzbj0H+r57YNex6hq39peD9Yk04xQ6rr3mX9pcwRG4hnARY0MjZA2kAAfMMDH489+zroF14T+Cnhy1lWGwDGS6vLsssqbZn5ikXs5BiAA3ZGOmcVva58bPBHwmuJodTmstKZozMbvULiG0j4OFjEW5pQ3ogTcecCvm8TU9pUetkezRhywRoeDfBetzaHpVot2mmpY23kTXNq5UXU+AJG2YyBuDchsndweK3bL4X+HvDNpC10beLTLVQwjy8aCTnL5Lnrknnknua8ls/j9N8StB13UtHmki0y1YxRz6gs9glwSnWGLasxQFtvmOVBJ+6OK8/wDA+m/Fjx3omnjUfE+i+C7OYC3t/IsmvtRdQ2zd5tw0oBOOCNuOK4ueEXbqdPLKWp9Sar4n8J+G9OnvDYtJbsVjlkttPd94ZgoGdvz9enNUvE/xq8M+B9PL3dxZ6bBEox9vu4bNEQd9rsHwB2CE+1fPvxa+GttqfhTR/Ct1qMesNNJFHc6157teTlJAhLtkgFiGJUKFGR1wM9Z4Z/Zq+HnhyPK+CPDVrBG22W5vZ988qg/M2Om4jPXFHtpXskHs1a7Oh+IX7UFj4H8P2+rTtYxW89xFDHJcR3Yhk3sOkgg/u5PAOcVzWs/treH00yabT5bmZlUssltoWoTqcH+EmFAeOmSKteNvDFn4i1jwz5kNy+m2dw08sc86TxKAMRvtyRwOAAO/X16vSp9O02G3a78S/u0OWtY7RUBUdFz+X60e1qt2HyQRyPxG/aQ1jwP4JHiCWy1GOKcxJan+y4nJkkAK5jWfd0yccdKyB+2M82lvJHp2tefsJDL4YnKZx1/4+OnX9K1vEn/CN6xeQbY7WEW98JUkindXVCjhlO4c8lTjoOPStfRdc8PaW0DXfiLU7gQvl4ZHTyzzwvXOOn5UuapfRhywMLXv2ktZ8O/Dt/F95balDpcdqs7SNpkbuu7CjdEswk6sOACRWRov7cnh27sY2vryCK62/vFm07ULdN2OQS1s3tzmt7XtQ8IeIEMSQWklt8wiYyyeYJt3L8cEAfwk4qHQdM0K3jt01TxOl9bfxwXOnqxcY+7uCngZHbmj2k1swUYlqH9qnT4/Dqa5dHTI9N8rzjfSNcwWwXGc+Y0O3HYEkfrXQaF8cPDHxA0KG4udPkuLWQLIUjjjv0VuxBiMgP8AP2rkfFXhvwbr/hKfw3LJdHSrrcslvFdJDbxx4+WMxsQCjEDoM149p/7IvhTW7dxJ4c0nR7vyWcaho92N6EDqo5O7ofTrT9tKK1D2abPpKbxJ8Pri5a5mt4dMlkBQ3F1YyWblR23lVOPYk9B6GuY8Sfs/WPiLULbU7PVV32jxyWbKjsYgA20rIrgjIY8jg8ZHArzXx1+z/rEnge3sPCuqWHhfVJGRYb5NQl8+eOMBpC8TgxSBgCCCox715r4J1b4saHeadbC78Pavod1J5E2paU9xpnkqFYlplilVGXC9kB+X8Kr2kd5IhwlfQ9K+P3hvXbPw7aSCGC41WxukmgvrtPtTy27IUnjA2oB8uDyxJIzgc1uyeKrW18Z+DfEaJBBaXVpF4bu7/UpvIZ23+ZGoBPzkjcBg8ZbrzXnuuftTTfCnxNp2k+ItUtHtLqDzxcyztc2JXO0KbhYd8DdD+9BUjPzdK6HUPHXg3xpa2WoaU62gZo5nu42gvYo2ibIYNC7lV5J3FQMdQDir6XiR5M5z45aL/YfjQzD5Yr+PztuOjqSjj67gT/wKvPvtCjgGu8+LVw9x4d0+5nKG6+1yziUOC915o3PKiKWHlZVCG3H7+CF7+Tm+3MfnzX0eHqc9JNnj1ocs3Y2jdKvJNMN4ueDzWP8Aa/fNI1wG71vczSNdrv5sZqOS5IGc1ltce9AuMd/zpCNBJi3Gal+0BV6jNZi3X0NQyXQ7nim2CRqNd+hFVJro+tZ73Q55JqpJcc9akrQ0muOeTxTPtWDweay/tRUk5oW4MmSTikBqG6460jXH+1WYsoY0NJx/9egC61171Wa8yx/xqs0q9zgVCqrJJ97IoA2beYbc9qSa4AbrWdLdCNQoOBVCbUTHwTzn1p6Aakl4u481UuLwBT3/ABrIlvi3J6U1rjzIzzilcLDb682t6ZrKmuwMsXyPSotQuN0mD296y5pzkr096Vxs0RqC560PfBl65rI87tmgz++6i4KxfuLwtjacH61Xa49eKqNIW7Y/Gk3ev86Vw6ljzB0BqSFtpqnkdqeJB0B5pDsX2fK1E8v+c1WMp24qNpDTuBZ86mSXGRjH61V87rTRJu5oAsNL8v8A9eq0knNDNxVdz1OaCWxJG3HPWozxTd3ekkk+X/69MkXzKjeTFN3Z71FI1MB+/wDzmgyGodxpGakMezZpufemM1Mz71IDi2OMZpN2aY2etMZto6UBoSFqa0lQl803f2oGT76a0tRFqb+NAiZpM96Y0hXkHNR7qbk0DHM7d+lN3fhSbs9aa31oGDMefT61G31px6etMJ6igVwVjuqbdUCr83WpMD1oA22zu44phumRuSasTIB1qnIxzjHFAEh1B2wu7ikadsc9Kgb3qJrgrwBxTGWvtG7vxUDSHPBqEzFuOgpF+9nNIRr2hOBk1aaUKetYq3JUcGnrdNt65pjNOSTcvByaq/bNkgquLw7sGopmVm3UhHQW0kTfNuwcVYWQNnDd65uOT5RhtvNX1uRGqndimBrqoYjt71cSMx4Hb1rHXUYynDcjmkXXwW4+nWmB0MTKynPTpml+RenNc9/bmzI7H3qSPVTMODz6U7gbpiVj0xTGtuc1QhuWwPn5q8LoeXyaBDWtyrHHIphkZVwOlWo5BIvHJ61GwDc9DmgepS3MDU8bLNwR70FQzYxSeQUPymgLkn2buBxU8ERC8rU1rhlw3Bq15aqo9PWiyC5UWDc3TH1omtxwcj8KdLfQwMcleuOaqyagkxwuAPahoNWRXAy2SPYVRmG1hj1rT2eYvrUElqfSpsBkzKd3HNMjt3atP7IVyW5/CljQf3aZRmtbsBVq1iLLnGDWlDZiU4/pVyPT/LGQP0piKEcJOO1X4o+mDxU8dmVOSP0q0tuF4xihILlNggXBOKxbyH94SOnrW3eQk5AGKzmt3bAIzR1JZktCWFMVdrY/WtiS3CrjvUH2Pd8wGeelBJUX5etTwyYU0+S39evrSLCFU96dgLFrdc4J4rUjk3LkcCsWIorHIrSt33IOOKNBpiXCGRsgZqKO1OckdeKuBl/GrFuoY4osF7lP7OVHIwaiMfzcitpod2KrS2eM/wCFKw+pkspHTNOj4PPFWJI8VFtzwaNRN6kisO1TRyc/hVbAHSnKxHemO5eWTdx0qVW2rnNUFkxUqydKYcvYvR3Hrx+NSedxwaoM/fpTo3LEDqfapuPl7mgk+0+ueMev0969l+EPwdfWNUjvvE9ns0tXjWGzMqiS5lkYCONk3DluRsYqT16AmuF+EPhP/hMPEQKyMr2QS5SEKpMzAghfmI4wCeAc46V9a+IoPh74NW18VeKr8XElmVFpeaxd7LWzl7/Z4VO0ynOAFDuAWGOePMxeJlD93Dc7sPRUvelsJqlx8UPiB40uvCulzWHhjQ7RftN1r11Ml1JDEz7BDbqqrHGxAI37S3J+Za6TWvhjomueM9J1DVtM077Jpn/Hpb28SksTGVyQSRJ82CN2eSTluMeAv+2JJ4m17TNG+GXhG51s6rfXFtBqk8RgtkkQF5ZPs0R+0MBnqxhyS3Has7RfA3xv+On/AAj0HiXxlceHoL7U5WvdB8Pf6PE1pEMrGUiAf5ig3GWYn58cda8Fx0tJnrKWvuo+pPiR8TPCfhvTYrPxV4i0fw3YYR4obu6hsT8oK7lR2DEHH9045rzKb9tbwBod1pPh/wAPXWra7qN1GWsYdL02RRLESzF1nufITy+D82cHAwTXn0n7Jvw0+Fnh/VJvHWp6T4ebxBq6zTx+JdSjtXa3jkyqpBl2dBgkIHy2eSa9b8AXHwquPEmszeGbTWdSguNOSytrrSPCU9vb+WvVFnuV8t8EZCghRg4q9N0ibvueaS/treJNe8PnVfDHwm1fUkW6Syt01S/S3N3KZdjeSI4ZFKK3VjIBz1NP1T4lftD674gsdK0/wj4Z0HzLb7VqJ1BbmRrNd4VkjLzLHLJtbjgAnjjrXpDeJtVvfGGn/D/wT8MJNYfQ7aPUZtV8U6+9jZhnLbPNigjkVwW+bZwAR04rufD/AIf+JttrWpaxNZfDqyuLhEiu7HSdKu5bkjICFnd1yuM8BACCCenNXe+gPzPlxtU+PGp6Rr+rXXi7w/Y6TG01tpyW9hYpPLKMCJ5C4lUrnI2oWOcc9aWf4Z/tAH+xdHu/i7dJrmoOJvOsdMiiEUGw7lECW3zYbHz+YByPlr3/AFrTfif4g8daX4W0vxVD4K8LWumf2lcro+i24eRmlZUSJJUkUAFWOeuSK34/hD4rlmmYfGbxxf6ja/vEbz7NrZmA4jkSKFcE4OVyBx1pJv8ApCsj5jh+Bvxc1jXbqKP4seKIrfR4EF80ZumN3MDubcPJXysrkbU3nkH2qp/wqX4p2um3PiqX4leLm0y4keK0sHmvgke87Y2WTyvMY5HRkAJPbrX0T8R/AvjnxEuj6XB4+8TabDc6mLfULjTb8LIFSJnMatGAVJcKN3PHFV7L4PaRdawuh2/xe8c3GsRgiext/GTyXtvtPzPJFuOF+7gY43U05PqDSPnO7+C/xq0X7Jo7/FjxNNrl7tlhnuEuAbdVwZB5XlMr9sksCMjg81mX3hH44mSW1074mefcaOD/AGpJfWFvOsrjBAKvbDyDszwxf1Jr6q1Twh8Q/Dfhe+s7Hx1rk+q2tnObe4uLiOZmRGIWRg2SR65PzY6Vzmk/CX4h2NjiX45+MWmb/WrPFZSfaC2BlImg3OpJI68Djmkm9/0CyPmyPxB8are6kvY9U8P6joMgf7PI2mWc05YAbQfKeJGUtxkNkelV7b4w/GXQ9Mlutb+Hml6reLIFS30p7uLzVKbmZZCZIgRn7p54OK+qLfw38SNOtzomsalo/jG0sZ0ltLrUvD6kYYbkJWEIqsvOAo9a4CG8+KuseIbnV38BfDnW5cGFLdjdWtxFACdvmOoZQ3y53bFIyBn1OYHGx5HY/tgXenz6ZZ3/AIT8Q2l1eLGyf2feQX8MbsT+7kLCEI3y9CfzrrPC/wC2Z4TvN9uPEVvYSW9wftNvrmnNahJcFSkj7GiyRuGDJg9q6LybXUtM1XSfF3gDW/D2rJMGa6s75dbi8tsEMomVQVwWAGCR2z0ry7xdo/wH17VdR0S48SweHLVlEc39v6XdWayzjgAyKFgKjAIJBII7VS5ZdBax1ue2eJPihpvxa0JUvtM0XVNL8iKEXmnwRX3lBWyWDxs2CV4wWGB2rlfDvwf8K6n4J1LRPDOq+H/Dt55dzcWd9qUckc8NwXJVlmVsgADOwZJBI24yR4ve/sgHUDpfizwrdNepJA1pbP4dvUu0G0DYzy2vlsp4J3EE9Ac1x0Oo/F7wHcabp9zeW/jAxvJHfnVIjIbYIdwLPDtuAcD5txbnbwc4pqMHsyHJ22PVND1L4k6VaeIPCPiTQbe4fSymb7S54XgljcK/nRRS5ILKFJWORATyQCBWPBM99Zm9h2tb5Ubt4GN2SuAQGKkKSCAR71yXhj9qPSJ7jTZNb086JL50iQprUCXNozqAjqJNgZMq+DvjGAT8+a2tX0/w1Ho01z4Tt7nQbS5b7bBpFlctc6Y7Z+ZrdmdiiEsxwrFVLN0yAO2jVlReuzOepCNReZpCfvu+lBusd/1rDm1S2kubhLS4NzFDJ5Zkwow20Er8pYd/XPFN+2bv4jXuxkpK6PLemjN/7Vn2pPte3vWF9s7Z/WhrrI/+vRcRvLeD/JqKS6Ayd1Yq3BPQ0hmLHn+dAzTa83Niqsl1gn/Gqplx0/nUEjsx6Z/GkBbF1uY5OKd9oCr96qMa7mPNOVipIx27mgDTguV29TTpbpfLxuxWdFcAIeQD1qndagNuN/egCzcXQ3Y396dBfBVKr8zVz1xdMWBByM/SpLe5CtuzmgDYur1kYk8gDPWs+S9WfnqaqXl6cHBwTVKOfnr0oA0XuD0J/CnxzHaRn9ay7icsoIOD6VCt4e56e9AyW+kPmHIwaoyMJF64I61LdXQZM5Gc1nedhj70wFZqBJULKevamc/WkKxaMq9P6U3zhnFNXe8eMZ70Rw5OTQMmVmz0qVVHXFMRffpSvMqj1pWBDpOV49aYF9agaYE8HFM+0c/eoDUmkXHSodxUYqKS4980zz/WnoLqTh8iopJMDpUf2gYxj9aikuB3oB2Hbt3H4013CjkVXNwO3FMaQt1OaCSZpB2qNmqJmpu71piJSeM5prNmmbh2NIzYGetSL0FP1pOaZ5h+lKsmOo59KB62FZu1Mk54oZs9qa3P1pAtBAp9aaRS9KY78UBuwajp3pobrmo2bvQWSMRio91NLZpCc/SgGuw8sKa1Jx6UUAk+oKcNQ1J9KQN60DEPDCnbvek3Dd0zT8j0pAa0195vApiygrzVMsd1KzE9OKYiaZsjj1qLy93vSg7gBTx8tADVhPpT/KI7Un2hF70v2gN0/nQIGjyPu0m3YvSpEkB6miZlCjFAEB4pWBIo4bvipFQY60AQ5bd6CnLMTx0FTbFpjRjrigBpkK8g4piyEyA5welSMmeMVGU29BQA6aRkIyefao1vpI/unBpTGWGCM1G1v7UwJo9YnU/fzV+31qWThm469ayVgP8Adp6wsvPSmB09rrSjCl+a0TfK4+U/rXE7zgVbt7148c0xHUpP824nFP8Atg3ZzXOtqTOuKRbsswIPAoEdUt4i7TnafTNPutUHklc4981yzXTMcsxFQXF6GXAY80ASXl801z9/5asW10Yzw3asdSAOTk+tTCbEeMc/WgZ0kOuKAFJGfrV+PVIWYAniuIVirccH1p32l0xubcKBHew3UFx8oPNWUsxgnGK4fTb7yyXDbSK6Ky8QmUBX5z70Dv0N2GHyznGOMVbjZe9UVvU8ofnnNUrjVkjztPOfWqEdIvlsv3hmmMqnq2BXIyaxJ1DkHPTNIutyL1agm51MnljPOfwqFowoznvXPf8ACQOrYzk+9P8A7Z3Yye+OtA7mrNGrZIGKgQbVIxzRDOHAJ5FS4DNntioDcpzKR780zy221deEP39+lSxW+5MY7VQzHaH86nhZlGM8VamsWZsgVBJCY+Mc0CRPG1SpcbOlVVyMVIsZY4pgatreBvkPX1q0cM2PasiGMoc4rTt23KCRzTFcrXMI/HNUZE2se9aVxndyOaqSR96kCpios7ferEmAKqs/OKktWJRJ2p6zdqqeZjvTfO9DQWXxNnArX8MaDc+Kdag0+2KxO2WeSQkLGg5Zj+HbvXNebgc8g8fTmtS18a3nh/ShpmhvIviDWJSguI0Z5LeJcbpV2gkNkhV4OGZW7VjWqezhzGtOPNKx69q3xUsfhnYyeDvhxYR6x4lu3+yXGoXaO1tDcmNmWGVkB8yZsECAYVP4zkFa0/A/7Od94puYPH3xU8R3At7G8sL9dR1i+S2bSsRlpIGlVkVE4z5UC4zjLcGo/h54H0r4B+FrPU5dB/4SXxrqQgttO0GFlBlLyDYs8uxdqCRm3SACSXk/dAx9C33wNn+IGoeBte+JYt7210NXvb3S+fsMSwRb1ihhK7SikAAkknnJ6ivmZ1He7Z7MYpKxi6T4k8G+DvhlLrfw/wBBbxVb6ebqaOWeBrDSZ5JZCCyRyYlmzv8AvFsHJO6u58AfDX4j6vY+G7jxp46uNNa4h3weD/BSxaZZ2aFc4flpZlAb5ircZzg4qz8Cfi9o/wC0J8EfE/ijTNBuNDjttZuNHWzu5VnRgrwsCnHyrtkA2gBQc49a+Yvim2raz/wVh8Eqt9J9l0e80+CCFWIEMJWTcigcYYKQfUNzVQpvn5XoKU1y3R9Q6r8IfC3gv4kL421uCD7B4d8O3F87TQvIUdZGAmwzMHJAOM4PzVR/ZV/av0f9qPVvF9nD4Y1Lw7FY2yX1nHeXSXMN1bsxVZduP3cgcA7eRhu+K7r9o8RnwH8SnG11Twg0eQRg5kc8Y/zxXy3/AMEyZFsdd8eStaKsNposKnaiJu/ec5c4J+7nk4rWlCNpN9DOcpXR9H/GzVNT+G/h/wCIereEYLZPFFx/ZWk2l5LArBJJMKJmjACsy+YzY4yQOlZH7H+qeNs+K9M8WeItT8UpFFHeQ3mrmFp45HBWSNSiL+7YqCFIOMda2/jcza74L1m6EaxG+1rRnVC4cY2Rt1HB/DNZv7KMP2XVvGl2sITy7KAGVLQqSQXJA6Bvp9K0ppckmKbd0W/2qr7UfC3wn+I99oV02jX1t4Uhjt7i3GwwF55EYrtGVOCfzr4l/wCCadtd+F/2gNSsdP1mR7LVdEvJNQtczOJpIwjJIxcBSwZjyOfmPqa+xf2kbqbxP+zp8Qry4Mmb3w9br++j8thm7cDIycf4V8z/APBPzwvqunfHYXE8CwWEWh3ysTMThyIscYwRjvnuPWro29nJmdS/PFH3z4+82Cz0+QFopVnvZEOOQfImYH35x+Vfjj+yhamx/aV+Gmsw6xMmsXWvQG5la2YNOJmPmh33fNuDn9OK/W3VdSm1PUNejkEojs7i4ijV5/MDf6JNkgbRt5HTJ61+Xv7M3g7VrT48fC+5uvs62sWuWW1/MYhgGGMdiaVFrlkyqt04n62+KoXbwvr/AFYfZZlB5Jxvfj8s/TNfij+05r+vRftb+MfEEfiR7fWNF1xo9PLNMr28cToEVMJgAZIxnB3H1Nfsf8Sr6aHUotNSSZI57e6kk2zqFICznBTaSQceo7fj+P37VHhHUr79pD4kI9sZNPk1uecOrjCrmM56cUUbXY6nQ/aS1ii1C602S6hSfAhuF8xNxRzCTuXPTk/rX5U/tgftL/FX4UfHqbQ/CeqTafoOk29tJJaxQo6XpdBJIZ8glgclevAHGDX6ga5rE3h/wvY3NsZhLJbWyr5VuZeTESCQCMABTX4+/wDBQ6zMf7VGtwpEnmzabanbs+8TCwIzzjB/kB2qaCTdmiqjaSsz9ZLXQNO8YaNoV5c2kdtPqFtZTSOIlZlRl3GNdwOB1HHNfHPxE/aQ8B/D39oSb4YapoFxqLzXcdpNqEhRrWwknbKIkJ++u11ySQSTntX2t4NmFr8N/Cl20e4JotiRtZRtYRjByTivyn/a2WKT9tq8nNov73UtHuNxjUOqt5GBuHXv7cVlSpxldMdSTVrH2brP7MNl4bjupPDok0rfPcTQNpUssLW37vzCdyHbgkDCleTtGa8X1bQ/in4d0qzurzWLP4h+HRfLNdaX4ntkW/gCsFdxPAVIf5ujZ/SvvrVrZmhuWDlVMUiljz96Ec/y/KvzL/4JqW99deMPiXpuoXh1O2a2iupIZsuskxmkDOc/xHbz68elRGL9m5dhv47DPiZoXw+utWsY9RkfwbrlxJOlgNXYC3SNh0guYV4IYgfveu4+leG+IPAPij4M3Kf2I0zWE8MIisZF8xb1iTunePcQVCgjzI8EDHQZr7W/awuvBvhn4jeCvDOtaFNqkPjB7yB3LosMTCVVVim0BmBZcdMCvHvH3w/8T/BPwLDa2djJ4g0m3OJdHknaRPIWR2zFIBujcKhOAccng9DcXy2Xchq+p5J4d+J+n+Jl/iju4yfNgzuO0NtMkbYHmJ8p5GCOhHQ11kVx5ihlPB6c9R6/yryL4jeFbddPs/F3hiR445I4rl1EYSW0IjGFKqMIB85bGRJjOAeux8K/GP8Ab1ncQSKI5YcMYwCApyQwGffnr/EPw9bD1H8PQ4a0Op6VHKQ2Sc9qtw/N16+lZsLCTHPNX42K9s+9egchYX7wpkzeWcAk5P0qNrsQt0zTXvUYfMaYh7lsdeKozXpVsA/jmnTXytwrYrMuJF3nBwKBlz+0iO3P1qJ9UK/MTgVnNMvPOKqyXIbIpAbDauGUkZJ6darNeA5J4NYslwYuc96b9uLd/wAKANJr4biDyKdHfLu4OB6VhyTljz0pvnY5H86Q7G3eXylcE81SS8289qzmm3N83PHrTRIV6Hj0pCNWS8Ei/KeKr+cWXg4qm1xtXngUz7QO3NMNCeR2buaYsnzc/wA6j+0e1MMmaNQ0LQmbvyKTzO9Vt9G760BcupN0HTFTfaD68VmbqXzD60w0LzSsvzbvaoGuuTx+tRs/y9arSNt5pDLTTZ6momf0NVmmz7Uhk460C1JGk5pvnY71XaTPem+Z75piLPmepqOR8dDVdrgL1FRm4B70DLG4nqaM/jVfzBjOaGk+XNFxk+7NIar+YaN57nimTa5K3tRz3qNW98/hQx/CkVoPpNxzz19aZ93vn8KM0Ekm7FMZ+9Mkb5ah3kcVI7aEzSVGz0hbLYzTW96AQ4MAKaze9IeBTTz1oKFZvegH3phXPtS9qAJFoP0qIMRS7qBj/wAKPYimZ96B9c0CH9O1FNXrTqChGn+brzTfN96Wa2Ktn+lNWE/5FBmTxyH1qUszVFHCU5xViNQwoEQeXuyajZvLPHJ6VZuMqo28c1T8tmbJoAf9ob1p3mlvvHiovLPpUscJY80APX61bhbjnpUUdv69KVsqTzTAshlo3Atiq65bHNSqpHPSkBKIx65pyw7qjViR6U7zjFzjNNCJBb0G35wFp8N8rDGP1qwGDLkVYrlNbbC9KSSMbdpqwsm1uTmpAqs3TJpDMw246UNCVX5etaj2p7Comgb0o1Az49zNgipvLK9KnFsSTxUiwhRj+KkBWfKrzWfIxaTnpWrJbs3HWofsPqvemBFDDuC/Wppbdmb5VxVmGDaF9vanSQuxJDHB7YpgZrQleTz7UghDAHBq+1qeuDmnR256YoEUVQxcrxk1YjmYEVeW1LLyMULYfNnrRYQ4ag8abSc/jUEkpk5FTNYk89KdHYsWAH8qdhXGRyfKM8mpVUscDrU/2Py+o/Sn+SBjFBJVmhZWBIyOlJGo81RirTIS2OlLHbnqOvrigNTYsbZtq85HpWtDZlkyVrH01vJYZyTjrmtO21ItvLtznFIZYNqIxnp+FQfbkts7hg05rl2B3cA1RuYd0bYFUWSxaqkzEAY59asSQrL8w61z8O5ZADxit+zljZgpbtQIha2IapoYCWzjtV1oU/gYE9etOjQBSScYp6CI47f14qaFAvQ5NQz3iQrtPVuKZBKU+78wNAia4j3Nz1qpKuBWqFEiZA5qrcW57jBpdB6GLcNxwKz5CQxrXuIPL6is+aPPtWZasVvvcUxlxjmptvGcUyVcqOO9M0G7SQRn/P8A+utj4U2dtJ8YLW6voftEUFhJcJGSoDspztyQcfOY+Rzx6ZBw3kK9vavRP2ddHbX/AI5eD7BN264vBGxViuYxiR1OOxEZrkxMeek0jWjLlmj7T+B3w1vR4PvPEfiCZbzXG1a9v7NWJCW3kxARJ8oGUUKm30wPfPpfguO8i+B/hg6rdSahfxeEZnuLqeQu8sjJyxPcnJ/P2rstWdLfRZURCBb2FxOSoOQJEYD9MVw+kyPa/B3UWk2q1t4e8oFMnAMcJyc8Z+Y18y9me3fY8W/4J1TLH+y2dPIiRtS8TX139/Lsq3NvHnH14/AVyS29tqX/AAVRuhLKi3EEtu0KMCC+yC4ZuenGQfwr0v8A4J6eG7qP9lfwNqMzgW9xfXarGWIYltTdt2OFxiMds89u9Lwz8H/G15+39qfji40Oez8HWd5K7atdskUTg2rRgRhjucl3xwMYBNdV/wB6c8l7mh6Z8WpHf4B/EOeRly3h4AyRoFGDPLggAt2968c/YP0Azx/FE20SzXE2n29uqlhhmLSfKSRgcj0NfTvxJ8N6L438P+KfCJe7S01exgsA+l2vmNEuW6ZAQE7u5757VzP7OPhzwR8K/DtxdeEbLxHeSawI5Z31ZN0uFPy/cXav+tzj6+lFOSjGSfX/AIITi5NNE3j3T5dL8Lx2If7PNBr2l25aPaQGS0QHAIAPQ10PwXs47q38SxpDNDJNFHG0shX95lXG7AHWtbUtZvbqO4ktfBk0087rdK18gMayhFAYhiMMAT05+U1T1rUfHGjzaEljNpNrJeagLSaKSzESSL5DudrCQ9GXGcUQkopoqS5rHIfHDwLPH8IvFvhzTrafUZf7MsYFjhh3SS/6SzMQqjkgGvP/ANlLwF4v0Lxwrat4WvNE0uDS5oYJ5rcxruOxQhJ5zwx/OvoRtY8WXEMTw3emCWaR4V2HfghXIbIX12cU670nxfqEjK2utaqjO6pZLhpABJtUuyED/lnzj+dCkoppLcUouTuyHxF4J/s+O6ls47ia4v5rmeZizyfM1vIqgZ6ctj8a+L/g78BPilo/j3wQ2r+D7qx0bTtUtrh5j5f7lUYEsQGzyP5+1fZkfhTxVZ655h8Wak8MtvGXt5Y/OjifJDbWVFznOfwrgtf8Y6r4E+LUVr4s+Jdroena5YwW+kWWoKYY5LpZJzMEJQfPtkgAy5zsPHo4N6qKJkr2bZ6j4q8Frq32rUVWaS+gtLiK1iVmVNz+YASvTOGxn3r81/2jPhT478RfEzxm8HgrWrrw/canNPDe2+nvKJUJUqylRk9+DxxX6KXnhPxVdXzSweJ74k+WghjYQxKCx3Pko27C9McEnqKw9LtfH+m6jq9mviUarFDPI0Et/DsYIS+1SVQA4+Qfh78TGXJdpFOPNuzo9X8InxNoGjWdxMLMxpayysY0ZsLGQy7XHHXHHIz+Ffl3+31YWknxw1P5PKvjpkI+0MwCj7+Fx74r9PnvPGyKzwX2lTEk/IzhcY3Y6r6BB+tcB4v07xLqFjqt9qvhzwp4jkiillaO70uORGRH2BDKWzkjJ+7xRCag7ilFyVjQ0PTZ9U+A/hJLe0F1P/YunMtuCq7yCpPLggfXHrX54ftdeFzo/wC1FqN+zItwY9KQoGXKMhjycD1xjjiv0j0Dx3qkej2kU/gK9sIbdEi8u0V9kSgKQqgAjA3Eenyn0r55+OXwZ8AfFnxtF4muZ/E+j+I5hbwC1trYT+aVYFP3bAHPzAHB7H0OCnJRvdjlHmse++Nsx2umLmJY57hYm8wZOGtGIx8y4OQOeevSvzw/4Jz2Y0n42/ErTjlpV05t6/fKlbifjjrgEV+g9v8AEbwh4kmsdMnn8m9t2juRbatE0LMFXYHUMNp9MjpnFfH37Jnwr8TeBv2nPHUmu6HcWNvf2N40d8I1ME485mQJIMq2UcHHX24zRF/umn5BL400Uf24poZv2gvgO4EbLb6xf27BZAxVs2zAEdvvZwa9L/aMsbt/C+jQ2Vw0Dy+J7NJArECSF3nV0PsVfH5V55+3tpF5pnxG+El/LGixf8JhiNkYlvnhtQysp4U5iYcdcV6z8eN39h2DmNWVL+0m3lm4IuYOVwCDxIc9MfjUy+z6D7o+Pv2jvhePAviLw1LpaeboFxZXMd7aswDsEEZDFtvZuRxwAeua+efhDoy6frHiCeN91tHL9kiYHG7aSTwQDkAp+JNfpt8SfC0PibT76yZPPzbzwDdgjEqvx+SH8q+B9J0pdEtmtioE/mM87AY3yknceOOtd+BvL5HJiPdXqb9o49auC4bPDYrIjuAvGP1p32tec9unNe0eaXLi6PPZhWbNfPzziopr7dnv+NZ0tx+8x260xlr+0JN3WoptQd+D/OqkswzxVd5MnNTcNC09wfWoTOf8mqzSYPXNMMhNF2HoW2n44qs0p3daY0mPpUBfnmmLUtGTj3phk7/hVfzBTGmC0rDLW/FJ53+c1WW4HTH60GTPtQGhYaQnpTPMbuKi3Y96RpOOmPxoDQl3FvalDFT1qDzN3/1zRv8AYU7oNCwZC3ekDGoFYZp4YUtAsiTf26fjSNIV6fzqMPzwKd96i47DPOZScnimtMZF645pJl7A81WdvLWkSStMV96Ybj8KqG43e1HmDvz+NUBYaQ9e31o8z3qubgd+lI1woFDAlY7m60zr2qtJcbuBwaQTbvb8aSYFzd+FKJAOpzVLzD60nmfT86BlxplHQUeZuFUxJu7/AK0u6mBb3Uitmq6vj3pd/wBaQywze9M8zb3/AFqLzMeppPMB7UCRN5m6k3bhnpUeRk54pQMLkGkHoO3d6XdUfPrSqPegYrNtpu7dTm6UirupAJRTiu2kLAds0gGmlVfeg/N7UDigYv40mz3pSv4UnTvTAcrYxmn7h6VF1p1IDaksST0zSLZd8YqSe8O4haSOZtuSOK0JHC1AWhbQDvUpmG3rimNcBRwc0CGSWozyMio2tVGOMZ9qtpMHXGeaf5YbB9KAM0W24nAzU62hUZxWhFGiE5Ap7MnPNMCh5IVckVF5IkPAq40TNnAyKIrdkb7uKBFVbfacEVKICwwBmrDxEtzxUqqVXA60WFcoeTjg09o0ZCuOaueX3OBTljj74/OnYDIWzJY4OBVmO3dVwK0kjTGdy0rSRwrk4oAppaZ5PB+lWIbYB844FMe/Rvur39amW4V0wePxp2FctRlG4yufTNP8lOvSso7VbcGqX7dtAK5HbrTA0Ps4bgCmf2buJIFVVvmxwf1qaHUWUYP50gJRp25eVxSrpo9M/jTJL5plwKLe4kjPrTAe2mkdFxSjT2Hara3RZR6+lPVzuHFJ3ApixLcY5+lSR6bt7Z/CtOFl5yMUjXHlngVSQrleOy2j7tL9kQnGOfpUqzs3Oaep5B60hkS2C+n6VKlkitUwfauSaryXHzZU5qrC0CW1WVuuKgks9jYUcU5ZHZuuKvRfvBk0WJ0Mv7LubnirC2q8ADPvVySEsPlHP0q5a2qovzHJx6VLWo+hlfY3XkUrW/lkHrmtZoyxPHFElsHxnj8KZJQRiy4POOhokjZl4bH4VfFqE6jNSpajOCP0plHPPalm4/lUkdoeM5J/KujWxTuMGpP7PRh6EcipsMzbWzXbkkjHXmmXkwCMiN8xrYXTx0H41DJpYbsKYmY0dq11LucZrct7BI1Bz7YxUtvZiJRkYqfaC3HSgXqNWNVXCihoc9Tn8KkVfm6VZWMEUFGNdWQbPH6Vi3VntJx/KuuuIiRkCsuazZmYkfpWfUs5n7OcYxUUkHGDxW61meeMfhVeSAL1H6VJa10MCS3wMg9OcY617P8Ase6eZ/2gNClKsfssNxcJgHn90VHT/f8A0qr8K/gbq/xOv438p7TRA+2a8zsLnPCRZGSScDcBgDPPQH7a+Gv7POi/Ci9vXs4LTSruRNkl6qtJdsjKpKb2Yqq5A5yBkDjtXn4jERinBatnXRpOTUmdx4y1e30238RgRySPJZx2vmwIZEh3Rou9m5AUFuh5p628V94RbRLfRJZbO501bOeSRxaJMFCh2V2w3zYHKg8ZxTtV8U+DPh9or2mt6ha2M10/mI1/egTvtCudin53OI93yoMgdBXjfi7/AIKDeBdBS7k8NWmpeKbsWa3sP9m2wiW4jaQJhZZMuDk/dKDoa8X2ba1PRckew6f8FTovwv0rRtBeXTbezmgNna6fOyxQKtyGO0fIGG3cSXySW5PFdZp/g/T4bSFdUv2vpzGnm/aLosNyksTsjwBnrjNfHmpftVfGjx7eX1t4J8CW1sIb2CGK81FZbuSa3K5lYgsqqwyAMKw5NWrX4W/tTfECWN9R8Z32h2i6v9shis2jsh9jUDZbny1TKk4JyuSBjNVaN9WK7Z9padDoXhvfItlHDGzJKHW3EMYKrtVtzHk9cHrzXGzfHL4Z+AtFtba88ZaDaW8Mq2cf2jW42Jl6iMKhOW/2QM4zxgV83WH/AATl1jVptOvPGXj+7v5LLVn1pWuLiWQpMcbAGLZCoFGAGx145rp9F/YT+CXha3SLVvEi6i6XjaiVkuky1wx+aRly25ucZIJHaqv2QerO48Sft1fBrwva6nNP4r0+SPTLpbC9W10+7upIrhi4EZAiBJOGGRkZznriuY8Rf8FGfhvpcutRpd61fy6GqtObLSYyskjBdsULyShXlw4+QfNgNxwcdHpf7PvwG0eNEttDuNRVZ2ukVLSeQLKxJaQFU4YljznvW7B4I+FOmxzi2+G11IrSmSTdp4Xc4x8x8xhnPBzRd9vxJ5Tx27/4KVeHo7p4ItC8UbUsBfTXEtvbxx2xKMywSgFmWQ7QMbTjdWV/w8a+1SafFB4E8VLLd7nuEmvYlawiDKBJIFjbduBJCpk4U9K+h44vB9vIgs/hmG2jcrbbVTz6/vCfzq1He2YjxbfDO1eN+VAkgw3PPCqffpRzS7fmVZHyrdf8FINYNnLLafDPxJc3H2jybSF9WEX2qPLZlLeRtQZC/K2G+YYHWvD/ANtj4ga/+1H8L7J9G8GeI7q40vWIwIVimvJAi2zmR9oiVkXfLtJYYPlA5+YY/R6TVjCpMfw709dvfegAz06Rf/rrw39o7WotQsNPsjodjo024TyW4vtYtlSFA2ZGl0uIyRrl/wDloNh255KjG1Go4zv/AJlQo+2kqadrnwR+xL+2Z8VvAvjnR/ALalrHifw1ciSBNG3STXNtsR3/ANH+V2XG05QKRjPGQCPr+T/gpXBY2rtd+EPF1lfR3BjlsWmgllijwD5znaECZ4253DHTHNeOWmjTeOdI+1wafeeLbe2kcR3tlpeneL4RtJ27LuE22qxEcDLAyLnr3r2r4I+O9AvrOTRPEHgKfV7qX5za3GuLqF9YZ4KzxXoiv4kJGB5iyIPlCyYIFa15e0d4o7v7PdOi5J3f6ej/AELNx/wU68M26aoZLPxUY7PBTZp9pOb1SxUtAPNUuAMZJK4zWpH/AMFHfAF8ZLa41iQQfYxfTfb9FzC0RUMy5id9zDPKDJ4Pvjs59K+F93MxuvhhcRN0DRxW7txnjKS5/L1rmtc+FHwK1xlju/Bupae652NFpsh2HHJG3djjI6etcfM+x53Lpub/AIa/ba+HfiK4sINO1/RTLewNc20LpeWcksKhiz/MgwBtc846Zrr9I+P/AII8eNY3FpqWn6tEJRNF/ZutWt0rsuQcKTnAJwQDkdOOlfO+rfsufs/X8g+z6tJos6uzKbgPBsZtwcDei4zuPHvXGN/wT+8Mai0E3hLx/avLaSNLZmGVH8ndwyqochQQTnaBzg4BovHqg1PsPWE8BaxdW73GmR2CQW6W0bXenSIUUMSAksZ+6Sc9OdufpjXPw/0bUFVPD2srbys6KEhvkmCjec4WTax+Unoe1fGKfsRfGL4arYt4Q8XXUNtYzSTRW9rfywo6uclX2shfnkbienpWK2t/tM/DRbJdXhfxHZ27zLdPf2cU5uAQfKJcKWUKcdDzk0uWEtEwuz6q+M37N914i0nQrnUpX1hLa/t72OLUJxG6zLEHMqPjCNvBXBJGC1ZfxUurnXPDhtNT0V7G/glilhu2DmJNskUjnKgqciI9O5FfNei/t6eJ/CqRW3ifwjeaZcratLeSaTNJGnmox+RYZDKpyADksg5/P1zwf+3R4E8Sb0k1a3sJGWETR6jb/ZRulUlULx74mPUHd6UOnLoJSR3OpeJLK71bVxBJMZo7RWME0bxN8hlyQp9Q68he/WvhHxVGlj4m1e0ViUivJgp24yPMbFfeHi7WPB/xCubHWYXbTEjEyte2VykyF2K5O5Pkfp935SK8i+IX7NVtrFnrOtad9n1WZFEjXNlM6yN94sXi5AIAz1rqw1VUG1PqY1oOoly9D5UN2OQDzVa4uSuMGl8QaLeeGrww3SkIcmOU52yLxgg/jyDjFZXn7m9P88V7kZKSujzbWepeF4TnI/WovM+brVTzvmpytuNXcnW5O8h3Z61FJIaazbfeo2bikFu4vmHNG7PeoWemrJyf8aQ9CduF61CzetJ5x5GP1qN2zQJjmIHOfao93PXNJmkY0XEO3Ubveot3OMUM1BJOpGaV8BQRVUyEU/zMrz/OkUPZj9aTkc4pm8euKRZBuxnNAyVX2t0zUyyDvxVfcKljIP3hx60AiURndntThkVG038IOKeh9WzQMSTjk1SugWXpV5iCORVGZirf7NMky5GK9+c0iyNRcMPOODxUeSO+aV2A9mNJu9v1ppbNN3FaAH0A0wN7UgJp3sgJC1JuprMe5/Wm7vejoA/dilDGot1SJ19e9MolDGjntSbvajdRdAPAPc0q/MxGcUq9OTSrjPFIB+3PU0u3jANCkdTS7s9BSFsAQ0oUjpSFj9KbvIPWkMfg96T6fzpm8mk3UgJOTTcEdaZ5hXvSNJ6mgCTIpNwqEyKO9J5o7UDLG6k3VB5lBk96AJtwo3VB5gNO3UCOpktNrZPT6VBNujbAHFbUlt6VC1nu681tYzuYcm8jOe9NUshzjNbbaaG7Un9l+1Fh3MnzmqRbqQ8dBWg2nY/hpPsIHQfpTsSVPPf+9mgSt1zVlrE/5FN+xsOgosMfHcsq4zj3pftu3BLZqP7K46ioGtXzzxQBJdakX5UY/Gof7Rl6A0fZT3FPSyJ6DNFiSE3UrH71L50jL941aTT2J+7VhdNYDIWiwamcs0mMZOaUq7fxE1qx6WzH7tWI9KPdapIRjxxttxjBqxHBL+FbCaXt5CVOtmyj7tMDI+yvt6Usdi54Iz+FbqQ44K1YghVu2KYGJDYNuwV4xVtNNZQOM1spbqxwRx61ZWEKPlWiwjAFiQen6U8WbNgAYrf8pccjmjYM4Ap2C5kw2wHBHNW47UYPHar3krjIXml8vjHSmIpPCFximm38xfxqxdKdoAqKMuvbIoGM8jbjIxUiIG4qdRuGTyKG2xkYHOaBFW6hKxjvzVNLd2bIHHerV1M7P0wKbHMwjOKBCCPHAGau2jKpwaz2kbtxT1m2jk80wN+GNGYE8CrSxQr1rl/t7gjDHFWhqZZeT+tSB0O2HsQPaoWVV6H9K55r5yflJp6Xr92oA3G2LjPWnCQY461iC9bPJ3H61PDeDucfjTsBomRlyTzUsExfP0qmt7GP4s8Uq6oi5GKLAXzIQOeKQ3XlkZHBHXNUl1KNzt61Xurjc2FbIxSsFy/PqaKw7rnmr0DLMgKHK1yu48jtWrZ3zQ2wUHvSsO5uxyLu2kVMrfPjbzWVb3Ak5PBq/byBpBu5PakWmaCwggZwKbJbow2gVOIwoGeKkVQ2AKlofMYl1ZhODx711fwp+Gs3jPxFbvI0UdjbSq1wrsu9sc4Cnt7njp9arQWD3s8cEZ2vIwQE9Px9v8Kj8R/F290CZfAvw5R21OYhb3UIs+YzE4IVlO5RjP3MMex6g8OIqckbLdnXRhzO72Pq3x1+0L4G+BFvJZW8rTasvypbwPuugSrFFYsSsAbYRk5YZGBg14vN8YPjV8frqa08KWU/hnS7vepuYGcXRR4wFZ5id6ujA8gqGB6Vb+Gf7OPhv4fx2+ufEO6fVNflzLHpNrlpcMS3IyFjByO45HJJJr0nxx+0Jpfw00lItQ1XTfAWnbMxWFmQ15ID6cZHHUqoH+16+Ik9onp+pzHhn9i3T4LyTVfiV4wha6knTUJIWuAW8/y9jvsJAywHOAa9m8G+EPhd4Dtba38NeD5taeBdiXM8IiTGc/x44yeycV8r/EL9rSLwro91qfg/RrLXLmR9g1bUpXl8zrlywIbIIA2k9+vHPyF45/bg+L2vaqhPihLO3jkjmFrpUSw27YIYK4UZcZGCGJz3q403J6kuXKfsJrnxmbwjA7ahqHhXwNa9mvLld2BjP32jGQCONp68Z7eJ+L/2/PhP4dZxqPxXvdYlB5ttBjkZevIBiRF/N+/418W/FPw74k8Qfsx6L8RdWjurm01OL7VLIEYQyTbmjLEA7R83oBwccY5+NZN8sjuU285IVcAf4VrTpp3FKTWx+xtl+2t8Ltd0u21PTNHutcjZBJPcXkpl+xliQiyq287jtOVUnFfPOvf8FdtfsZpofD3ww8P6cFYqHur24mBxkZ2r5WPXBFR/8E0/gfafFL4ZfFW41Znt4rWSzFnIIVc72WQsRnthU6c8dfX4c8VeD9W0nXdYjms5ittPKXmKfLtDsN2fwojGPO0wcnZNH13p3/BWP4t3XiC1fUdM8Nrpe8+ZaafY+S7ZUhf3shlIAYhjgZO3HGa6f9o79sj42+C/DtlHHr95o99dTpKmo20EcDAFG3wmPBVl6EMQG47DIPwzY+C73ULeKSOe2DSLuWJnO/noMY7/ANa/Vv8A4KifAYeJvhx4Bg8L6LbDVrS5WOWaKILI0IgZcEgZPIXrUz5YyT6ArtM/O3UP20Pjnqilbj4peJQD1EN60X/oGK7n9nL48/FXx18Q18NTeNNZ1efVkwhvb95Jh5fzlIndjs3KGzgE8dOteK2Pwyvtuoi/s71JLKdreRo0ARNrYZix7Dmvrz/gmJ8MYY/2lPCmvS6fNJHAL6S0vmIaNh9kkXPBwD8x681pKULNIUbpnjP7SXxi+JOjeNrfw7c+KNW09tGieKJrW7khmKO5YLI6lfMxtGCR3rl9R+LXju0+D/hfUIfGviKG8n13VoJLiPVJ1keOO305kVmDZIUyyEAnjc2MZNfTH/BTz4X32uftYRajb2jzWV9YwwsIcBi8asTjpnqK8I1T4Yz3Pwf8BWC2Ez3X/CRa6JLNbmNnC+TYDAAIyw+XjPY0U5R5V3Bpm3+zXFrXxgt9fgvFXWL+xmW+uNTuihv33qQgF04aQYKE4965D/hp7x54J8UajaxT2N9BbymD7Pq1qL8RSRgxmWGScvLAxOW/dSIMmvu3/gkP8NLvwjr3xTv7m1aOK6tbOCATgE4DTFgT/wB8gj2r4Q/aa+Hr6N8ePH7eRNb2MviC+KSNsVSWuGKhATyOTURcedtdTdVqsYpKT+8q2f7Znxssdmz4jazJt6faHSY/jvU5/Gvp7w3+1V8SdO+GNr4xup5Nd023t43uHngiLXhVis3zlf3XccKRkV8UL8N9WupbaG1sbozyqSY5Y8HoSCO2OK/TjwD8ItNsf+CSutSatotudcj0rVb3z5Ih5yOtzMyEN14CjinU5XaxhG/U+SW/4KPfEH+07l20XQJ7B5XMUE0EiypGWJVC8bqGIBAztGcdK7bwJ+3Rb+PPEVnpmtfDbTfLkP728guyfKGPv7Hicn04Pevh+W1KKx8yNwMZ2t616v8AsleD/wDhOv2kvAXh5pBbrqGoiB3aPeFUoxbKkjPANaSjHlbsSm7n2jJ+1R4B8N6f9pkvdb8I3EbxEWsNxIsrxybsSJErpuUbefl9OK6Pwz+2PoesKE0r4p2MzHjyPEUSx7ucbSZEiY8ej9+9fL//AAUr+Dtr8GPj9Y6Xp8nm2F1osF0jCIRgMZJVYYBPTaPzr5N+6elRClGUbg5NOx+w194ysvFVq51/wZofiaz2bzeaXOA4GOoBDL+UleU+KvgX8GfGErPbm+8Haj5iyD7ZEREr5JAEgJUeo+cEV8+eOLXxf8FvhT4P8bad9rtbe/WG0s3uIZBDGjQSNsAYBTkAnPXKg+ted+Ff2tPiDojxRXl3beIrdcKIdUgDNt9A67W/Mms40+ZXiVKXQ9r8Qfsw/ET4XSPqfgLxLNd2gRwktjclid7ZZmVT8xPvuqLwv+1r4t8C6rJa+LdNurR1d1a7sP3DqMqFVlwI343MSVToM1dsvjho8Swaw6yeCtRa3MjzW022ISDrGQQBIeOMq304rpr7xdoHxG0ZW17TbHxNY9BrGj4W4j6cso4J57bf92nZ/a1Fc6e48deEvjL4f1Ca2MMeqS2xDXFioRJmOGDT2/3kLbMb0yhzkcV8x694dvPD91HFcQLCku5oipXlQxHTOR+PWn+N/hNe+BGfxd8P9Za60mJt7Patta3bkEOoGFbB29O/TvUOnfEK1+J1iwvYo7PxNarhtqlVuAM5JGeG6cdOOMdK6aEvZvTZmNRcyKcfzAn04p28r2qqLkKoPO7oT0prXfpXqnCXQxbqaax4wTVT7UcdaYZtwzu70E37Fhjimr96oluA3H9aUy+h5+tIRY3fLwOajZSx46VF5x9aXzj60yxec9OKQnnGKasuW5okYL06mgb2GswVvWkaQcDGPemg+tEhX1oI6AWBYAHNKxOMAZ5zUKsF4709ZMNmgE9B/lmmiMrzT/N3Y7Uu7nBOaBkMjle2aVZmP8XFOkAPtUDL/tcVIbFgyjFIbkqv/wBeqzSBaj84elO4i79qOOtRSXO4c1Skm9KhaYmgB0rHeSB8tRs+eKazE9+KYzYpAPBHrQ2F6nmot3uKQtj6UASbgvbNBk9BioGkzxTR81AyxuLd6bz61Ep20u6jYRMFxgk/pUqsc1XWTdx0p+7GO9Ay2oPrmlXGeajR8qOaGb3oAl/H9KX7vOag3e9DSDHWgC2r7ulPU7SfpVJZ8Hg0faDQMvbgwpOO9UvO2j2pfMPrQBYZuwpV9aiVtxFThe2aAIWbJx0qN2A6mnyjHNQfe680gAsGpjN6Ur4XpUX3uaBj9xWk8wtUTNTN4HBpAWVYg5NP8z3qqGH0p9AHqM10qt60RXSseeKzJmLNSIxBGRmukwubm4dqkyB16Vlx3W1R61J9uFMLmjtRu+aBbA9qpR3Uch5O0/WrMVwo6PRYCf7GcdKPsPqP0qVbtdv3qb9vVuKYEb6ep4Ipv9lr2/WrH2rd0OaPtA4BPNAit/ZG6pl0cDqM1aS4VQCead/aEa5xyaAI49JVe2KmXT0x0zVObWDuyBx0xmmnVgw5OPxoA1I7OOPnjpSloF4JFYMl8zdCcfWoVuCxzk5+tCEdOJoVHalURyDggVzqzHoWJFWY7oxrkNTA3PsibQTwaX7OF4Az71ipfyyEfPkVeh1ML97r9aYi+tu3rxVlFRV5bms9dUU8A4oa+G3IPNAF3erNinbVB4NZbXjKpwMn601Z5W5BoDQ2Qpboo+tI1u3BJ4rOjupV/i4q1HeP/EcimF0WPsu7oOafHZ7TyKZHen0pGvHz0z+NAFgWq9/5U42cbc5x7Yqj9odj1qUXDIuSc0C1JpNNjk+71+lRf2OV7fpUX9pbWAUc4z1q7BqBkwGOKAKMml9wP0qBtNYHpn8K6qKSFoxkCn7bduhGTTA4yTTG7LUf2B16qa7n7HFjkg0n9mI3YGgDjEsmXnZTTaPu6V2H9lhmII4oGiox5GKQHIrYyHnbUbWr7iMc12x0Mlfaq0mhnsPpimBya28ijBFTLCV68fhXQPo7qMhc1Wk09lOCP0oAyRG/93ilWFlJJ4rZjtexH6VK2mvIvypQBg+TyDnP4VMV6ADIrW/seQDJU1JHo7MvQkfSlqBRt1fGBxWnbB0INT22k7WwUPStOLTRGudtSUiHcZFBJ+arELsvUdqmS32/w1P9jO0HP6VJRg+Ldcl0Pw/dXkeQyIfmBIxweao/s+65beB9LfXCY5PEF0GlN5PGHWxh7vj++wJCgnoW610OseH11zSbuwc/8fEZQHHQ9q8h+FuhaxrnxV8E+AbO5X+z9Rla0uZM5W7YxuzFm/uptIFeVio+9c9HDy92x3i/tST+LviJB4b0LTr0w6lcLbx6vcuWurmVs8kEHg4wBzwPYY+YPjjb3Hh3xlf6derK+ouu6eSYkMGLHOOM4xkYJxXv3wV8B3PhL/got4K8MXbJILTVfNMcbbk/dwSuv5AVmf8ABQDwxPrn7TmrC3jYqLa3B8tRyzSOCa41ZSVuqOt3cT0P4Y/CO01T/gnHqHi97i6TUoZ797eOPaFZY3wAeM8kEV8a6H8M9R1S4aB4JhP8pCxgHIOfyxj9a/Ur4ZeFIdN/4J26LoSIyRXq3x9W+e6lGa+WP2X0TxN8bvE+ky2cL2lrbSTRysv70bJEGC3cHce3pWaqOLlYfLdK59NfE/w5FpX/AATH8IaXeMtsv9h2wYSkqqs827Jx7sPyr5auP2XIb74R3PiZiFf7Ptia3YOjfOEDA455Jr7f/al08L+x/oGkhhHG1nYRHIBwpaPPH+etea/AvQ1/4Yt8PwSZfzLyRF8z5iUOolQM/QCsuZpOSfU05Vsd7/wT60CHwn8K/inZLNLI9rqUNtKz4+VltAxAwO2+ue1j4I6Lefsy+INaSET3N3Z3M8ckqgMN8hAGfbdXo37Jtoln8Nfi46DaLjxbeZPriCFa6fVNP8z9kuDdEsbzaXCSi8gbpl/xrOV2rlxtex+dPgH4cj4h/tZP8PrXS45dI8O2rXclutwbcs8SI3msw5YhpANvTk1+vXxG0m31zXLCC4iE3l28jhWGRnKjP61+a/7MFus3/BRz4kO862yx6fPHkqDnLWw28kcnpX6hX8Im8ZKOcrZPjI/20pyV4/JD2s/U/HD9pLwPdX3jC30KzIi06a51XVrpS+0SbLsxrkdwN3Tv+Fe0f8EyfCtz4Q/aQ1yxjuo7jS2064lREQKPMUxqHVRwvDsMCsH9pi1a08VtcQTXFvOthfhmtgSWifUTuU4B4yF5rvP+Cb4gk/aG1zyxOJI9HuSRKzHAM0I79/wrSnrSuOVjsP8AgoRpbq2q6xbKqXtrp96IpT1jzHCpYH1AY/nXwh4g0mfTPgf8OnspRbvb+J9elikAOQyx6fghiN2fXPBr9Dv28rcXXg7xPIxIC6ffbtuc9Lf0r4C8XQ2w/Z3+HD+VL5LeJPEJU/PuJEdh17gdadFfES9kfq5+yl4Xh8O2viSWKJYWvUgmkVBhQxjycD6kmvyh/bB8KjWv2iPH1ze3JIXU5IIIWbCxDYrbgB6kk1+x/wADbVLXTdQCjA+z23r/AM8hX4t/tuLIv7TfxHTfIANQBUKSB80EfNTh76Mmortnsn7Jvg6TxF4SiN5P9vfStVe1imYHJiaPdtJPoT+lffnjTQWtf2FfGWl2i+XIdB1NYhxwzCUjGfc18f8A7AGlwH4W3nlhj/xN4mcsSSSYM96+9/Flqrfsy+JINuV/sm+yuevyyHnpWcX+8kOVlFH4ffAHQV8fX2s6BqNolzdWtq1zA0ijeNvVSe45H519e/C74S6Z4J/aQ+DerrAtvJ/wkEduWiUDLNbSYBPpkfpXi37Gs6eIPjl4liWX7RHJo8hVCOEwBkA+2f1r7XvtJW18f/CSdYcmPxZp+cDldySDP/j1aTk/atIlJciZ4t/wV08D/wDCT/G/wg0EjJcnw5M+0Lu3LHOenv8APXwd8RfhPdeA9Psb1pWltrrj94ApBwDjryeentX6sft7eHV1j9o/4Xhkys3h/V4icdw0JH/oRr42/ba0BdN+Gnhi5WPywdQVCAPWBj/Stac3zKJEoq1z6d/4KA+HV1L/AIJ2/DK4hj3/AGFtHuIxGpP37Ro+3r5lfkoVKsQRgjg5r9v/AI0aKnib/gn74FgfbJt03Q3HXBwsQzX4+ePPC6w/FvUdFVfKBuFUKg6ZRW/r+taUZWTRE1dpn0r+31+z7B8H/APwv1a0v5L0agk9vcCSFV2uqRMCCOxBbj2r5q+DlrqU/iV5NMnMUsUZLxknZIuDwwyAeQDg+ntX6Jf8FWLFZv2avhfe7f3kOqJF8o/v2rk/qgrxT/glXodtrHxD8XC5torlVtbdAJVyMMZcj8cfypQly0bhKPv2PE/Cfxsj1DWRGFfS76RBGLpsPHcnusqAYAPoOOOtcN44nj0vxJHrOmwjTrkSlbm0ThY5B/d9UYdK2vhb8E9T+Ifxb1Pwpptsk8ljPNGyyPtA2SFR19x0781xBtbvXtRkt72RUu7eYRNuwPlBII4HJBHH410K17Ix6XPS7ZmvraKYjb5ihwvoDU4sGXnrUMN0kahU4RAFAz2HFacN8mFzjn3r0kcW7Ky2Z2njmoJLfaSDwK2dyucjpiqtzH260wZjkDdijIXmpZIjuOBTJodoGec0xCeaPrT1bcOKhaL+7To8x9elIaFb5W45FBbdUc7DoOBUJbHekEn0J2bApvmZ61EW5xScUyWSE4+7TwDjJNQLIFanecPrQZk26jzNx61A0m4elMWTaaNS0TvJtqIy5zzULyZ4zUHmHcR7UCJmm3cCot5z1qPdt6mkLD1pAPZsd6ZuHqKazj603eP7opALIwK8HvTF+lLIw28DHNR7j60AS5HpSNyvSo92BSeZ7UxiYwetJu2jrmkkbdUbUASeZ/nNOV+f/r1BSikItq2OaN3tUKtx1pd49f1oKJgx7UGRhUW8ev60jSDHWgRJ5xppmPp+tQNL6Uwyn1xQBaWb86ljPzVSVu/Q1NG57GgZdI96VT2HFQqzMeelKM544oAsofm64q4kw21SjG44qU/d4oAlbB71CWAySKjaYR9TmoJrgN0oAVm3ZqNsqtQNPt6HNHnk9RmgYrSVGWz0GabJluRSRg7qQEq5p2aTmloYHqM0ILZqPyd3Q1I+VakzntXUYELQkdBn8ai8uRTkitGONW7VOkCNwKAMyNWNTICorT+yRqvzc09beLbkCmIzFZunNO2N2zmtMQp2HNSR267ulAGXtZSAcitK3ZDGN1SG2VmJ68elKtmOlMQq+XyFb86jktS3KipPsrRsMLmtC3T+8vGKBmL9gZuNtN/stmJ4roxbqe1O+zr6UAcxJYsq421B9nZT0xXW/YUbO78KjbSYpOnNAHNrC2eRketOETfWuiXSQi8AUp0st1WgDFjt22gY/Grcdm2M4x71qLpwVc7cj1zR5IjHWmTuZMluxbgYFI1uW9q0dyrkMvvmnRyRt2oCyKUdu23jOakWGRF61YkuBGcBaj84tTF6CpIBwRk1J54XoKZw2OOfWpRallB60AAuhwDU6XCHgioPspGDnFEgC8E7qAuWfOTtUF1IWXC5FN2jtxUwj+WmIqqu3B6nGKnjyvSgR/N3/KpB8vagCeOdh1OR6UrTP2Y1WViz9D0qXDN6j8KANOymLR/MxLVK2oPAxXJHHrWbDuXGKdNvkbnrQBdj1SXcSTx9alGrOvv+NZ0asvB5p+H42jHNAGlJqVxJHgEgE9qksbqVJMuSwx3qvDMy4BXI9auLMOhWmVpY0opN/B+bNTrYxyNyB+VZyXAjXIp39obmx0/Ggk0l0mPdng+2Kl+xxxNg4IArNF8y/dPP1qRZnmU7mJ4pBc0/ske0Y5zU8dgir90D8KyIbrytoJ7461rLed93GMUWAmWxiYDHT6VYXS1HUgeneqC3/ksQrZHcUqXjSPyxxUtFLQumxTocD3pfsKR8hhVSS5K4zx70xrjccgkGosPmLvkptZc8EYyK6z9mH4H2Ogt8DdeubZo9c87VbqZ2YgbMXQT9GWuKhZpFPPABP6V9f+FdPSPXvAVuVCLY+HJ5tuO7RoM+3Ln868vHbRPSwerZ8a/C+xGtf8FVo5cbvsdvdXG70P2OQZ/8frW+LnhWHxR8ePFt7OCfJktkDY7Kkrkfyo/Zlszef8FKvHdyeRaaBdyo3bpBH/7Ma7HxLCLjxd40uzzi6lJYf7FoT/Nq8mbso+h6UVds9H8NWo039kH4f2hDAtYmU/8AApJH/rXyN+xTbm8+M3xCn8sCOGxkw3fJuAD/AOg19m65C2n/ALOfgG3HCrokBPGOtuW/ma+R/wBhVfM8VfFC+25b7Ptz9ZpT/SpW8glsj6j/AGyVMP7PeiWiKHKpYLtJx02E/wAqwvg7p/2f9kj4fwjnzpbdgO3zXpat39vSM2vwfsIom2vHLbAEAdhz19h+tR/C618n9mH4TREYLRae35uzf1ofwAr3Ok/Zzxa/BLx3OB/rfE2py5x6BF/H7tdnqyqn7L+jqvCyafp4Geo3SxH+tc18B8W/7NGr3AADS6tqspPr++Yf0rrPEkbL+zn4ciI2tJa6SMe5khpSXuj6nxV+ytpwvv8AgoN8Wne1W6VI2ADFRtJmgwea/TMl18bSbiNv2Nuhz/Gn+fwr8yv2QJreb9vP4pzSXj2UgOwncqmZvtEXyfMD6H8q/TKaQr42nbHC2BPTn761XRei/IqXRep+Yv7SEd3L4tRrZ1RP7HuDLu3HKtfnPQjuBXd/8E3YT/wvzxJP50bk6NcfKqnP+vh5yTXF/HS0bWvH32ZLG41Bj4aldRbo7BG/tAgFtvQc9+K9R/4J5+Cb/wAL/GTxFc3dk1pHPo8qruYHnzos/wARP6VVJr2VmOae52v7ban/AIQjxf8APhl0+8IJHTP2fnrXwV48+0J+zb8NS8sUhbxP4iBkKkA5SwxgBuK+8f23mLeBvGGUMu7TLz5AMk/6jgV8FeOoD/wzV8L4Ftc48TeIX2sBkfLYjkZ61VH7REtkfsR8H8tpt9hh/wAe1v0P/TKvxl/bgaSD9qTx/EGQj7ajep/4946/Zj4NsP7JvmXp9nt8c8H91X41ft0Qhv2pvHrKgZvtMbAr1/4909DU4foEviZ9O/8ABPdS/wAMb1mwGk1C2bjOBmDFfemuQm5+Auuw7BJ5mn3abfqr/wCNfAP/AATwVYfhjqo2sAuoWxwxOf8AVY71+gxUTfBzUIuSrW06n16NWUf4kgl0Pxt/4J2rHb/GnUIt/wC9k0aVtjcHopzj05r9B9SRF1/4czOSgTxNpRz6kyBcf59a/O/9gffH+0hAkjku+iXEZbGOmwD9AK/Q3xAfLbwTIeRF4k0dif8At7jX+tVP+K36C+yjX/bKtUk+N3winb7zQ6lAOOuUiP8ASvjH9vrTy3wP8PTqMeXq8G72zbzD/Cvt39saFf8AhaHweuCORqF3CPxtyf8A2X9K+S/22o1X4AxTOB5cGp2UrAgHgMynr9aIfxRS+A+r7BF1T/gn14CJJYf8I7pD575Cw/8A16/KX4laeLX9rCSJkwkk1swH1tUGfzz+Vfq/8PD/AGp+wB4NdSrL/wAIvaMuFx91V/8Aia/Lv47w/ZP2rNKcDHmx2rf+Olf6VrD7XzM3uj7q/wCCivh9fEX7IPg9iufJ1rTs49GSSM/+hV4N/wAEytHHh34ueJrNc/vtPs5SOnR5gf5frX1B+1/bHUv2LbKQjPkXulz/AJXCA/8AoVeC/sQxDSfjteoowZNL2Hj+7cOP/Zqz5v3di38Vzz39lK3XSv23fibZFSvk6zfIO2At5IP615d8afgnZ+CtEHiSEym6l8Z31hIpA27N0pT36R/qa9t+HdqNE/4KRfFK0UbBNd3FwBjGPMkjk/8AaldR+0zo8f8AwrH4jR+WN9l4oW5j4zt3yYJH4SGupNqqvOxg/gZ8Ux5UseobB/GrCP0zxSGMkDA2jr+ZPFKFx1Ne0eUXbW4ZeN2RU8kxbHOKzvMCgVJ5ny9aQ7lhpBzmq88m6oWk7VAzFuc1QX7EzMu3DetRs4/h6/WmHgdc+1N79KljTFbLc5xURY/WpKjZdvvQD3Dlz6UcqCc5pwxSN0pktkHmDuKXzAenFIwG38aYuCeBikA9ZCPf8aXzCSaY3HvSxruPpVC1BvrTc+nNSMmB60zbikMizzgij5fansvtTdo9BSAjkC446/WozUsgAXgd6iPNIAZt3amml201gaAEJoVd1G00DK9qAGE01qftPpSbaAGUYz3xTtu2loAb096SlakoATNG6hqbQAhUnvik2H+9Ss22k8z2oAcF4xmpI8/3sVB5ntT4ZO1BSL0bkripI/vcmqysB05p/mZ68UDLfmhehpslydvBxVKSUqcAUm/cvWgCSSbPvUbBmXpTGyPep4vc8elAFfyyeaMbRyammUK2B+VV5Gzx0NIB6/WlJx0NRI+088055AelAEiyetSZFVNx4pfM9qQHr8yndnpTY42Y9OKLhm3DuKfGzKMZrrMCdIsL6+1TJ8vQYqGJmLVdVdy8jFAEW0yHnpUscYQUjfLR5g28mgCZVyferMcBNV4ZO/f61J5zEcAk5wFHU0xFraI1pwK7etQ3cYtbiSPzDKFJXOxl+YcEYYAjByOR2qtI7cAUIRorKg4NSRzr6cVlbjgZOKljY9jzVCNkSIy9KY0ZboSapxzED5ulWkuQoGBQAjRvnkH60z94h4Vh+NaEUyMMk1LuixzRYDM8yV2zytSpLJwMEiryeU3SneWpPA/GiwFZnkY7VBxjnmmNau2S3Iq2y7eAM+9MZTjvTsBQltuMDrVfyCvGcVotFu5wc0gsWc5FKwjLkU5pEU1pSWbDHy1C8BHGMe9AEKj5c+lTrcPtABxTVjP3efrVsW+2PJH40AVmmdhgnNRyEtzjFTbPm4FPWHpkcZxQBCuatRg7enFPW3CnpViJN1MRTZWz0poUscY5rV8tT1FRNhfurmmBVWEhfQ0KrbuelTMrN7U9FPcZoAkhwyj/ABqdom67agSEswABFa6whbcHFAGX5bK3P8qXB47fhVlYmfc2cDOMU6OEN94/hTAjXII44qzD8zDIpywE844qaKP+IDP4UCFuIQFCj86gjtWaUDGa0FjZlqaCPyenNAXGx6a20fT0qZbPy155zxVuKT93knFRNK7HOMigRizKySnAzg1Lb3ThgCeKlmtmkkJ9T6VZt9LPXbzigZIkYkxjrWjDZsq7iKm07TSu0sM1vLprSqAVwO/FJjRzMkTP2ytWLfT/ADQMcGug/sfYMAfpmnw6eYz0/SpsMy108Ivl4+ZhgV9j24Fj40Vcf8eXhrYDjpkxj/2WvmDS9H+3alZoV5aZF/NgP619QXgdfFXi+XqsWlQwrgdMs3/xNeLmDfuo9fBR3Z84fsyeF7aH9qLxv4gRT58/hiQSvnu14AP0SqeqcWnjacHIaTUG/wDISqP511v7MMe/4gfES84Aj0S0h685e4nb+grldTgkfwn4rKxsWYXoHGckzIox+eK8eWyPRjoez/F6P+z/AIReGrQceRo0K9MdLXFfJf7BD22oWvxIkt+WVoIX46MTM39RX2R8ddEvb7QbDSbaBmupLE28SYOC3lADoOnvXjX7If7Muu/BXQtbs/EFxa/b9YuY5pPs5JEaqCMc4Zjz6CqjJXkn5Clsjb/4KLXktr8MIVhZUf7Ui5Y4GAjE8/hXQeEYFtfgH8JYQjDFrpxA78W7tn/PpXe/HLwrovjCa0Oof2LNaW7NJ9n19/LTcQQGCuBkgE/rzWZrGveCL3SNM0uDxRBbmwCeWuixfaNu2NkAVUjkGBuyOD0FDu1YFuVvg/Yz6f8AsvmGaB47ie51KRYpQUJ3XMu0/MAcEYOcV2/xFj+x/B7QLZgv7l9MjZeo+R48j/x2q+meMbWTwjB4ftNA8Va5aRxeW1wukSxPMT1clvJXJPcKOtWr6bW/Emiw6VJ8NNYvdPiEYjh1Ce2tx8nQtmVye3UUna1rjW92fM37KvwbuPAP7SHi7xnqOvaHcjxNdMlpYW9z/pUQMwcEhgOqr0Ffa1wwTxfdb3UM1mxG188B1z37fSvPPCvgvxJ4PjSPwx8LPDvh8IuEJ1eKMj8Y7Vjnn1ro/sHxVvGWSTTvCdq4BAZ9RvJmAPUZCJxTW1mxOSbVj5MhsPDmoeLJr281e6lnk0lNOlsYbKaZfL+0tNuLRowySAuOoxn2r3n9mzw/oth4qv5tGttQiJt5TLJcWc0UY3urBQzxqMjHTPPPFdtH4H+If8M/gy0zyfKsbp+f+/wzUv8AwgvxFbr4k8O26nqsGkTY/W45NZxhKP8ATLdRtctzxf8Aaf0uw1aa90jWFvvsF9bXEcjWEDvNtLW/CrsPJ59OnXtXkPir4K+BL74VeENMl0vxF/Z1vf6ncWoghkNyszG23sw2dDsXt2NfZx8DePztH/CW6OSvIP8AYp6+o/e8f/WrIuIdbvrq30Ow8ceHv+EiszI10rWBIZHK+WqoJeGGxsnPOenFO0tXr+IlJaIu/Ae8OpaFqTiFreNRHAokBDYVAAWBA59sV8NftEfAbwH4u+MnijVNf1TxFY6rPMDKlnYzmEDywilSIGBxjqD3/Gvte8+HvxKWIiLxR4fYk8q+kTAE++2fmsu88AfFJ9vmar4RuSv3d1jeKQP+/wDS1SVrr7wvrc+XP2btD8O/DWO88OaLql7rCXM9vIZb+BoZItikc7kXOa+19J33Hwpu0ABYrMvJx1z/AI15o3gj4oWrArYeDJhHwmGvI+eeRlmwar3Fz8adOg8hfDWjXUPTbb+IJowR9HhYfnRB2bbf5ildnwj+z3+z9qnwh+N9r4nv9f0fUtIW3uLVlsXkaaNmIIBTbjtjg9cV9XeIme60/wANG2+cnWtJmUN8vyrdxMTz04B468VDqngnU5NSW91X4E6fPfRSeYt5p97ZPJuOTuB8pGzz60l54rntPsUd/wDDbxVYJZTxTxiKzW4G6Ngy5Mc4JGV9Kabbu2Delkdp+2XHI3jT4QTpG7LHr7q5A4Aa1l5J7DgV8pftuQl/2c9ZRsAxXdqeT0/fhfy+avcvi18f9E+JVhaadr15qXhae3nSWOeTRrqFlKnJB3RSryM8hgffrnhfGi+B/id4FuPDdr4o0XUllC4h1C7jVXZZA43biGHIHIT8K0SfPzEX92x7b+z3IL7/AIJ9eEowQ5Xwzs4P90uuR+Vfmh+07Zi3/aL8KXaNkvb2YKZweJpAT/Kv03+FOoaH4J/Zys/Askotbu2sZbaFII5ZLYbizDbLt2kfN3Ir8/v2lPgr4n8T/Ebwx4o0mxa9srKGGO5aDMgXZOX3blBXox6kdK0i7N30Ie6PuL49W41P9hnVJCcmGwtpx/wGeNv6V87/ALLe23+PygHb5lncKMf9dYz/AF/Wvo7xdE+u/sJ+Jmj/AHqf2DKwYDglBn/2Wvmr9nGTyfj1pLHpNaylfUqyxPkeorGPw2Zb3Kl5pP8AZH/BSbx7dEMDKlmVPqslrCzfqlegftE6as/gv4xxKN2Db3Y49FhY/wAj+dYfxSjGmf8ABQO6cEYvNJ02X64SRM/+OV6L8aLA3lp8ULYDi50BJwMdxBj+aVvzNVIv0MmvdZ+bYUsTj7v/ANYUjRnpitmHTTIFOPlIobTduSB7V9DY8kxNmP4abt9q1JbXb+dV5I6SRJnslR7autGKiaPPQ0wK+M0m2pxHTXUikBAeaaakxzUZ60gImYjvTdxbPPantzSfhQBFnK496RVPapVXFPVSOetAEIUt/wDqqRRtPPNTLHn2o8vjr+lADPvdsUx/SpgpXmmkUAQK3PK0xlPXr7VM3FCjdx1oAgamHNWmiz7fhUflj1oArsuR6Uxo/wAat+WPWmtGF5zmgCqsefaho9vTmrH8PSkxx0oGVthPUYpv4VaK1FJHjmkIgbpwKYcr1FTstM27sjBpjsQdaMY61IVCnpikYBu1IdiNiKSpPLxyP5U0gtx0oERyfdplSMpbimEUCAe5xTlwD1phz9KapO7GaCiyrFaXzN2OcVB5m3jGaQyegxSAtswxk0zcAc5zVcyEjFNaQrQMt7hTlkB479qoGY0nnNxgBmzwpGQT2B9qAL/mblycH/aB4qpJIN3vXVfE/RIdE1+1nswgsNW0+21O28pNqBJYxlQM8bXVx+Fcczd6PMZL5nWhZNvvUO6lpiLKtnmncetVlbDdaf5g9akD2m54bgVCrEVt3WmkSY21D/Zp9K6zAz45COc1cjnbbyaG09gemaT7OV420CJFYydelPWB2k46UxIWxyasQoy5xmmBNHakYPeug8G6Ul74osBKu62jf7RKMdY4wXYY9wuPxrmsyhupHvXTeHZrjTvDeu6pG3lzMken27lAxDSNvfAPGQkbDnP36JaLQqNrq5wemW9/Y+INYXWbgHW768kvLtPOLR75DuAjDY7ZJ7nIAUBCTvxwEcnpmoLO3upL6S8urrzG+7FFFAsMaR4Uj5V+U5OewrSEBkIyOB0qKfNy+8b4p03P91sU2jy/oKeseOlWjaqenJp32Xb/AA5rY5CDaSBxUijbxirCW54+XFTrak84zQIqRqc8GrUSNmp47cegq1HbsMELmmBGiFu2Ku29vu7U6G3LcFKvQW4jxxRYkrNp7NyFpV0pmXkYrctYUYjNaQsgcbV5p2A5L+x2YgY/Sp00Nl7fpXa2ujvJg7M8Z4q/Ho53D92R+FFhnmtxospGAhqg2kyR5JU/Wva7Pw2b3AMfFYviLwu1v8ij8AKLAeUfY23cLRJHJtxyR6V28fhlihIQt68UxfCzuclMDpRYZwy27f3cVOlq3Suwk8MtCp+X6VDHoEndCKQHOR2jHjbmpksWUcDH0rpRopjH3PxpfsQT+HI6UxHNC0duvT3p/wBhJ+6MVvm1VeopyWYY4AxxQBzrWRHB5/Ck+y7edtdJ/ZytS/2Yozhc0AYVrZtJIDjirs0R8luORxWtDprEccU+TTxtII5NFhGJFB+5HHNRtblmDAVrNZmNcKDmlW1dkIxSsIyAsjZwcdsYq3a27ZGT19q1rbSSedueKuw6OzHhcY5p2GUI7EgHnkjinQ2Lq20jOa34dP2oAFwfc1Yj08uwz161VhHPfYxGp3dM1PDaxbRu6Zrof7IDe4NSR6CnU807AY0OlxNghep61qWulRNwen0q5DpThhtzj0xWtb6WxT7hoQFW10mNVGBxWhHZ9ABV+10tlxxVxrYRrjjNBRlrZhu1H9niT7owPWrjQtnjmp7WE9CNoqWCkXfCOl7/ABFpKYHN1H+jA17LdK0t346nRC+Et4lDHAJ2ucZPA69yK8PuvG2nfDvytYv50gW1Il/eHjOflHqSTjAHJrQ8Nw+P/jZMbwSS+DNDuH3rcPEp1C56fOqnIhGM88tyORkg/PY9qU0ux7OD92D8yb4Wy6T8FbHxPf8Ai6/trK615LeOCBp1VkSIOdwB+ZyTJ0RW6dTVjwpewXCqfB3gfW/E0m9nW8vkFnb7jJvyHmGSMhf+WfavUfh/+zx4U8ISC8j0z7fqjndJqWot9onkYfxFmzz9MV7HZaPHbqpdQF6e4+lebytnbdHj9v4X+KPioLPf6po3hvcPuwwvfzD1+aQrHnr0StjT/wBnyG+jUeIPFXiPXeOYTemztye+IoAi4+ua9Bm8RxWF5NajSdWmeI7fMhsyyN0OVbuOalXxWpH/ACCNYHubU5/nWijrqyebsYei/AfwJoLK1r4X0vzAP9bNAJXz67nya7az0ix09AlvawwKOixRKoH4ACsj/hKg4x/ZGrnn/n2x/WpF8UBeRo2rf+A4/wDiq05Y9iNTf8xF/wD1U5ZA3T+VYB8UH/oD6r/4Dj/4qo77xrbaVZyXd7Z3llaRDc89wqRov1LMKrRCszpN3rSlx0r5m+LX7ffw3+F+lXMsQvvEOqr+7ttPs4gjXMx4SNGb7xYkD5A3rjANeA/EH9vXXNZ0m6mfX9L8FQ29ss9zpGlzJearFu2jy32vtVwWwcyREYJxxV+ZPkfeXjf4meFfhtYxXfijxBYaHDNIsUP2yYI80jHCpGn3nYnoFBJrxrxD+2BY3VrfTeD9CuNTsrMMZ9b1RhaWEO0ZJLMR09GKHg1+UniPxJ40+NnjuPxLpMeoXFtpk4mtz4oSN7MSKcrKWHyO33h8xcjJwT1Ho8nwj8YfGDXJNQ1jWdc8Q3kjN5lnotw6adbRsQfI3yHYkYwBhFyTk854h8qasWo9TufHn7eWs+LvF2r/AG3xBd+JNBgBt7Pw34PljgSeRcMZZp2APlncQAolGUHPPGLof7QfjKw1u71X/hV15L4MdcW+lQrKup8AbZmcyFQN27ny8AHOOOfU/Bv7HdzZW9pdSwafpY86ETW1hGGneEyKG3XLr1APAAA+XtXqc3wd8NaL4qtNP03SbdJZvNWfUZL4fbCwX90gYtuDY3HG3GM0m9UralJaXPL/AAD+3JqWi69ZSSeJk0jR75Ft08N+MJIjPDOuWZluVYqyNkKN7RdOnOB9VaH+1voUcdpH4r0m+8OPcD5LuONprV+hyrgcjBB+XcOepr5c+Jn7Mdon/Ezlt7e7ndmh86VDBdRA8YWdMYGSOua8PvvAfjL4P6reX+ieIdXN7dR4aw8Rzu9jKu3YqttBicBQMF06jrzTa/mQlZ7H62+FfGWgePNMGo+HdVs9cs87DPY3KSqrA4IbB4II5BAPtWtJZh1I2ZPTkCvxg+HvjzWfgfcWIvbDWbee4ckS+E1MESMeWl/ePsLM3VUdFOQcDbX1lpX7dWveC9Nnmk1TRfiHDbWYvG0h51s9bEY4KiPADsDkYVZO3zUcsXsLVH3HJpIk3fJjPGMAfjwaoXHhtpMYTd7E15J8Pf24vhZ8QdOtbiLVptLnnUH7PeRcBjjjzFyncdSDyOK9hj8X2lxCs0VrqE8LrvSSO0dlYeowOaTgluHMzGv/AAfuhkaS2jZApJ5HTFea698G/BXiiM/avD+k6gD1ZreMk/pmvY5vFFtLDIr2GqBCCp/0GXJz6cVyzaDoDMCLfXYjnjZaTD/2SsuSHkO7PnbWv2RfAy75dJ0+98Mz53CbRb6a1OforYrkNW/Z88Y6Kxl0P4iX88agmODxBaRX6j2LsA+Pxr6/+z6Taxhc+IJF/utYzP8A+06ZdWehNDIEg1cyhTtzp065PYZEVLl7MLs+F9W1z4z+A7G8sb3QYPEWjyxMk40PUHjWWIg7laCfenIz93b/ADrzrwZ8U/CPgvx9pms3dlf+HNQtWMbWGpxNZh8qEwrHfHnj+8or7w1vSrWZXtZBcQSzKcLPaTIuOOcugHccA56+lef+NPhrZa5bSx3um219bMuDHJGrqR6EEY/Slq/MLnzt8QvEFn8QP2jvDPxC0hXh0m40y2sp47h0zFJG8hBDqSrgiQ/dJxtHrx7n46txdeJNdgCki88MqB6H5ZR+PAFfPPjD9l200q4lvPBl/deFLlstJHAwa2mbOdskTZVh/kYrhNI+M3jL4Ma0tl4tsle3aNrWO7iJktJIzn5cEkw9+hK+3PFqN2mib6WZ5VHOsdqqgfOVAPtxUf8AD8xx7VDcZtpmUOjx5yjJ0IwMY/z3qs11ubk19Emmrnk2d7MW4w3A9apyKB71YZ89Rx61XkkC0A9ys0Yb2FM8kLzUjzAdqhknGOKAsgkjqBlqTz92RmomkDdTUkkR69KYybh6fhU/3qNnuKNBlFozng0gUj3q60QXnNGz2zSGyoFPpUqxbqsLHz0xU8cHtinYRT8sqKjPAxV+aMLx1qq6++KdgIO9P8sbc0q4DYNOGOeabsMrsvGfeo92ParDqFXr3qtJ+lLoA7d701vWmowDYpWb8akLDd/tSbuKbu3UowaegWADIxinD5R0qZVG3inLCze1MCAHPrQ0eV6VOLc7ualW3PcfpRYRntGFHTH4VFs54Fa8lvlelQ/Ze+MUDvoZUkZA6ZquIznnitt7M/5FV3tj3FKw7maq+tNb5avtb+1Qvb57UguilTSvNW2hC9qhkQg9KQELLtqMqM9amPPB4pjYXvmgZCabk098UzB7UALuNI3zUnI7Uq8+1ADdtKF68/0p22k3BG5oA9C8QKfEHwV8L6n1n0S/uNGmOP8AllJ+/gP0yZQK86ZTxmvR/hao17wv498L4Ly3WljVLWNjk+faMHwvuYjIPbHevN/MDdOR1z9QKhD8wAx70v4YoVl70bh0AxVCFHUU/atMVc96ftpDPrW+0XbcssibCfaqN1pKW65zk+1eip4y8M60vlSxtpeon/lhfLsz9M9fwJplx4V+2bWgh8xWHHlgn8cYr0eXS5xbHl5sxn7vFN+wR915rurvwlLDnMRGP9k1nSeH3j+8uKmwXZy66ao5FP8AsI9K3f7Hk7KcYz0NJ/ZT5xjmlZhzGG2nqVb5frg10er2JsfC2hWIGJJ2l1OXjGd58uM/98xsf+BVHBos91cRQQjMsrqirzySQB+tbfjD9/4iu44iPs9qVs4f9yJRGD/47n/gRpWd0ik9GzjY7Hb6mpltX9OK1xbjAp6253Y4IrTlZndmN9jLfw1LHZkdj+VbAgKc8Y6VPDHt5C5o5RamRHZsei5/CrkWns6/drTVfQLUscTso+XH0xRZBcoxaQG/hq1HpDdlq/bwNnmtW0tST1AyOM9/88/lVJCMBdJePkc9sVbi0+RsDbXX2ujGUD92W9MVsWnhoMy/Jj1zT2A4u10GZ5EwhbvwK7DRfDEkyj5BkgZFer+C/h7bvZmaVd79sDtXa2/gyws42ZIlDEYyaydRLQ3VO542PBr2yoFGSw7Crdj4JeZgjhgScdO1erWempDKzSIhxwOOtakcMO07UQH6Vm6jL9mcPafD2K1twVcq+OorA1TwE6zySSbpN3TPavV3UbQqgcdazpbZpJTk5+tCkOUEeTxeB5Iw2yHA7jFK/wAPt0eGTBIznHSvWGto1XHcVVez8xi3RavmZHKeQXHgmOEgFCT06daqN4OXOANv4V6Zf6fcSXP7tSV6dKrNpLW/zOoP1NWmRY83bwaxb7oYelU7vwM/QJ+lenyRrn7u36VagjVk5UYqhLU8Xk8EyRqdyfpVCbwvJCThK95/si3uMbk4zUd54Vt5WXyouvqeKVw5TwFtCkDcjb9ab/ZEqNnZn6V7fqng/TdOV21DULPTYthcTXUoiXAxzlu2SAfrXLah4q+Dugw3Kal8V/Ckl5GmxIbbUUkKvkcnB6YzUSqRiUqcnqjzj+z5gwIUjINPj02VsEowJHRhiulk+JnwSWcGT4q6Eyj76x7vm9gelJH8Qfhjq0hXS/H3h65ZmPl27ajGkhHYAMwzSVaA/ZyMNNHdgPk/KrEeh4X5l7+ldHJdaIGnMV8gtUxtuI8vGcjuy5Uc+/ardvoI1SF57G5S8t0kMRmhbchYAE4Pcc9atTjLYjla3Oeh0+OEAcZqwsEEf3jg9PWtG68N3ELMNpHvzzVG50WW1heUxSMsamQhAWbAGTgd6q/URHJHCnA6tTIYdueevGaz5vEEen20l5d6XrcFtDEZnmk0uUIqBdxOcemT+FYul/GDwZfabaXcGs/aEnTzF8uF2IGRwQBkHmoVal/MjT2NT+U7e3t89cnirtrGA2dp/GuWg+LXhTzFiF3cbm4BFo+OW2jkjHXj6g+ma2NH+IOi6vDJNpsGp6lbpL5RntLCSSPdgEjcOM4NHtqX8y+8FRq/ys6y3hRtuE7VdFuFxgCvNB+0F4K07WL/AEe8m1K21SyKie1fTpfMTKhumPQ1sWnxu8GPGWN5c7xwYvsjlx8xXp1zkH8qTrUv5l94/Y1P5WdwFbaRio1tfMPI6+prltN+M3hXWrq3tNLGpapd3CNJFb2lizyMqjJO3PoM1avvjN4Y8D6ppy+LdP1/w/aXc7W6zXmjylWYIW4CsCR0yc8VMq9KP2l95SoVL/CdH/ZoWT0xWrpPhHVNWYrY6ddXLckGOJsficYH41p+Gv2oPhv4R82203xBdDzmy5OhTN8wO0gEvnrxj1rW/wCG2fAi2skzeJbhdiNJtOhSAsBuyB+85PyN3/hPoa4JY5/ZidccH/MzibH9j/xd4w+MFvr3id7G38KafEj2dlJP5krz/wB5kUFeAWwd3evqzQfAtto8KK0rTMAPugKPyrxHUP2s9OtdMmvZbfxJbWSRGZr3/hGiURAMlv8AWnsPSvLNa/bk0zxBHE3h60k1iOWPcLjxBrKWEIBOAxt4FLYztHJH3q8qXvNyaPQjHlXKj7O1DWNC8PRySX9/aWSxLuYzTKpUfTNcyPjh4SuJ5YdL1K11GdMZ/wBKiij/AO+nYenYGvimT43at42hm0+78faH4b067XyZ7HwzpUYMit1jM85kdsg84x6ivQbz4H+FZtL1l5NHtVljtpYY0MA6D7rZ+9n34yW4FTzdi+Uwv2ifEnh7xx8ZPCQsvEcd3dakTo9zpOga9cCOGU5MM87xYRUG5lb1Oyuhs/2YZ9yGXUbd1yoI/wCEvvMcFSVHzegYf8C9q6GT4e/Cb4c6Lbx65bWekQBF/wBGnkffLgZ4QEuc89BXh3xI/aQ+D3hvVrXSfCHgCz1u+nlBNzeTC1tYIgQrzbmbDYyPlLKST0qORy2bC/Lueuw/sz3JVEkurG5PCsV8T3gLH93n+Pvtl+nmf7PPFeN9B8JfDWSOy1vXLCfVVQN/Z1h4gvZ7lsGMZKq+FG4PyxH+sHpz4D8Uf2ivDHhXVtSsLq8M+rfPF9j0OydbOOQYKxmdwck5B+WNxwfmGOfB9M1Txzr3iK61pbpvBX2yOSMap9ocXPkPj93HvBkHQf6sJ9BT9j1cmL2j6I+wPEPi7RdFsIHuyvhhph+5k1nXbqN5gFOSkXmb3PA+6rD35r59g+PkCtrZs017xlrH2iKTTbbVftKaemVKsQiszkKQOWaInfjA5NP0f9mPxT8VtRXWNXgvdfysaNqeuKLJJEUDbtVcyvgHqzDOMnmvpDwP+yjoWk6ekWvXc+poF50+wgW0tF4wAdvLcccmtIxSWmpLl1Z8japofjb4ta1aL4hv7a02ussek+HIN7owbKs0UYxvx0aVmPXnmvffhh+xHOslveT6Jb2TYBS81xVurnaSSx8kYRSST1zgmvsrwt8O/Dvhe1t7bS9Et9Mt4Vwq20IQHgdSOT+JNegWOlWapGDCzx4+51H1qmtNWJeR5D4G/Zr8MaNHFLqMcmsTxcRtqT5ij90i4RR06DjmvOvjMuk/8JdoPh698eL4eGpDzba20iJyzukqurMQ2DGpK9gD7V7v8TPipY/C2yhjMStc3jtFboEViQFy2FJGTggYz/FXNePtL0XUvGWgpfWTLHercJHIrBTDGqRr5cbDkfMV6GsJaSSRvFaNst6X8UI/+FN6XqUmrWcGo3tqBb3dw0eJHb7rFTldzEj5QT+lZN14L8TTap4O1Pxhq9vf3enXKXX2e3jSCCKeWIqWCKpMjY4GW43H1rX8U/DLTP8AhFbC1aOY2Fttt1aJgrKX5J3DPQjgY4684qj4r1h9POoa1e6df61pug/ZYtN0+2/4+b2aOMLG2eBlmkYFjgALk8CspO0tS47XR6R448N/29o89kZ4vlAV9zHr1wQPu/lXzR8UrzUZvFXhezbxFa6daXLStBoslqGl1Bo4nZogWI6BDyAeo9cV6h8MviBr/jbWr2VrEyW0OmRtcXOzED3IMhOx+PMHQZ4yFzjnFeW/tReLdfk03RvEEtm9hqdhFe3OlW6WqS3FpcCFkhYsw5JdgxCcEYya3lVcnFIxVPluzY1L4I+FfFOkx32jGbSWuoQ7SW2PLkzyGaJsrk8ds9a8E8YfskXlrDdNaaVby+c26a+0SJUnB/v+S6ld3JOQRjJx1r6a+FGh6jH8O9Akv72eS5uIxPM9whEkhYA5IwCvJPYdq6l9JnuGlKrIFz95HKqfzrsdKMldaHMpNbn5tWuh+OvhbMmm6ZBD4pd8GRvEDSNLGqA/KsRKyIdoxiKXtWrrHxkv4fEWlaPo2s+KvDd1brJJqelW1zeR6erMQoAdQkkagEtnZJ0A3d6+/tQ8E+HvEVjc2viHSodQeQnDMgLqOgw+Swx6g14t8Uv2cdC1e2uE0u+kmRgRHpupW5uoz1wBICHTqeQfxrJqcfM0Tizyfw78ZNTh0y6Orf8ACRaxDAzRPrPhvxhezQxfJJgyqs52NuaM/OVPy4xzx7F8M00/40wTDwd8Q9U1C5B+bTZfHd/BewqS+0NDIwYcbMEZB2Z7183eKv2fPEHw9hSDw7FqHg+ScfvLzTIxcRNGRyvnKPOj5weQ3Qc8c+T+M/DHiKPVEu20v7VEEYXniIOJH3bUVd/kRjbs2kgumTuOSKxcebq0acziu5+ktx+zt49SXeNb8TqCwBVfH94p6jIHzH+EOPq2e1YOtfs9/E7TdLnkj8Q+MZtibnNv8RLlGO3yyxGc4JAmwOcb1H8PPwt4A+Ket3txDFo93b+J7a3ws1rryz28JVRz5dwHCqOCfmKkjPHFfV/wV8ffCT4ieH5bfxV4RuPDup2Nw1tfWa3st7bwTD7rB1YEhlYEMoYc9aPZyW0394c/kcd+x78f9cu/+Eju9c8Qa341iu7srY6TqviVZr3T7dCck208mSzM3LA/wj1r6m0n44eBtWufsk2sR6PesPmttUH2dgfTJJX0707T/wBnv4W+NbOKG00qz1SER7EMV25lg44L4YlDjPXtms/V/wBmf4bR2muImgaZZXUFtNHbt9n+dT5XD7ictyc9OcU3J31RPKdlN4P0rxHbtNazedEwyJraQOp/pXlPxL/Zfk8ZaXcwWt7aTwyKV+z3ylQeDxuGf5V8e+Fv2jvE3hmSDz/DOj67GoWNb7w7LcaTcsRhfmCBkc/L3XrXv/w+/blhtI2mmu9X0qZU3fZfFmkC8jYeguLdgw6HBZexot2It3PmfWP2T/iv8N7rUILvwte6po8bl7W90xlu1CejBSWUD3FefXWbC4aC7ja2nU/NDMCkg/4Cea/V2H9sTwvb2jXU9jqEdukQne5j8MX/AJSrjJffsxtwCfpWZd/tXfBrxfHbXF7qXhvVBIEkQ3vh+8kIDYAPMBwfmx9eK64V5QVmrmUqPM7pn5aecrdHVlzjg+nX/P1qNo/MyBzz2r73+KGm/s/fGTV7DUZ/Emn+H54LdYEj0KyurKKVS7MCy/Zjk8kZ9q+Pb/wXPdapqR0K1ub/AEyK5kjilhjkn+UEbcsEHVSp5A+9XXCtGW+hzSpSj5nBTQkDvVdoa6m60C8hnuYGtpWntdpngWMiVA33coQDz/UVVbQ7oqD5Em44+XY2cngdvXH6+lae0j3I5X2Oc8rGc1FIvpxXUXnhm8tYIZZkjjimAZGaVeh9s56c1VbwvetEsmyNFZwgZpFALYzjJ4zjJx7VPPHuCi+xiRsSvSn59q6Kx+HniC9j329h5q9c+dGOOn97/OKYPBGttuH2PBXlt0igAEZBznpiq5o9w5X2MDaWxVhIfl5revfh14j0xTJc6c0MYUuZGddm0dSWzjFYSyYJGQ2P4l5B6Hg9+o6U4tS+FkSi0G1c4xirQdPKIxzVXO5h2578Vfh0m9uLW2nhsbqWC4laGCSOFmWWRRkouOrDK5A5GenFVewkjMlGVPHeqknIPOK9otf2VfilrGk6NqOn+Ery9ttSjaVVUCJ7cByuJhLs2E9QK17H9inx5JomrXmr3GjeHtTgSJrLTb7VbXddlmw4Z1lIi2jnkHPTip9pHuXyux88n5TnNJ5ma940b9jfxtqGsWVtqOpeGdO0+aQLNfR69az+Sp43eWJAW5xwPWuWuv2YfiLa6rNanRFaBRM6X6XMckDois+7KFiMheARnJAqedPqKx5c0lQcseuKffW9xY3BguoJbSdQrGGdCjgEZGVPTgg/jUPnDp096pMAYbeaRmzSM/vmo2lAoGLnbzml3H1qLcD3pVYN3oAtRyHir8bKcbuntWYnOOcVZhkORgZ5pkuJpKqA+lTqqs2BzxmqM0eI9x61LYu0jFD2pk9C8tv5gxjikWxDEqByDVq1h3RNz8y9qvaTY+Yp3fepkmX/AGeAv3ap3FmsfauumsRCuTWPeRKc96AOckhG3/61V2Uc8VozxjnB5rOmYLSGUZAd3pUDIW71akcVExFSMrNH75/CmNCD/wDqqdiKbQMrtD6VGyFee1WGNMbnvSGVX+YelMPy96nZR1zxUT4YYIoDUi8w+nFIxzQc5pCfWkM674QeKI/CXxO8N6lcY+xJeJDdZ/54S5ilB/4A7VmePPDMvgvxtr2gyjD6dey249CA52n8V21z7YAJ3YPY+nvXqPx9kGtXvhPxjGPk8S6JbzTMOn2qEeROD75RT+NSV0PL9xWnLKPSq7SHuaRZMUCLwkGOtO8wetZ6zfNU2+mM+gbP4waLfSJbapshJJ3Q3aFTn3Vh1zxXc+F/EViyONK1GWyjPzMocvAP9na2dv0UiuKfUvDviyTbqir5DkBYLmJZCOefnYEjH1q1rXhPwbqwtLOKSC0gXJU2ciQttAJwzLjOSB19a1jUlEUoI+nvh74+hvNBs4NTktZp0XHmrYpk9+jE+vrXfRnS7yEMkccpI6/YYAPbqh9a+OoPh/4S0yZEt9ZuprcQlmMmszoytnCgbWx0z29K2ZPCvhAXFsln4guJZJJsPHeavclFGzOc7yo59q6OaL3M+W2iR9eL4L0262w3GJJnwWVLS2UAnjqIuwzU1v8ADnw1uUyQqFYk5ZIgOMf7FfIeneEvDF1DK0mox+d5g2S3l7I4LEgYABPHPUn8K2/+EC8LWt9dLLc6a1rGqlJobpSQTzgcZxyKV4fzP7l/mCT6pf18j6tfwXoMNxA/kxKEIaN1t7c4I+sdEPgvQrVmH2aEo3zbX0+23e5/1XPWvl+T4feEPOtvK1DS7iKfJlV7nyWU4HRkA55PX0rTm8DeBjaqwvkt3L8Qy6vPIn3ev3/1pXh3f3L/ADC0v5T6WHgnw7LjbYwndwP+JfbD/wBpVK/gHR2IHko0a9VGn2pA/wDINfMUfhvwbYx3VrPdWKvuMa3Nvq028ZHYeZ15/Sn2/hfwo0GnwwatZSWxjzN9q1GRmyB/ESevNH7v+b8F/mFn/L+P/APqO18BaHH9yGNCTj/jxtf/AIzVfUfB+gWtnc3JsEYwxtIfs9lbtKwUZwiiP5jx0r5+j8J+Cfs6wyvp8bllXi4aQZOcnOelOtfDngPTcy6naaPNChVlcZc9M9Pb+lH7tK/M/uX+YrNv4fx/4B08fxm8Ay2riTwb4wuUj+/5mirEc9+Pl6Z9KsQfE74XyZLeA/E6rtyGfTnGfykrE1DxjoWo3/mCe3niWBY41mtHKqAeo+Q8Hjt2pLHxN4e025Y3FlZfvCAP9GY4B9Bsrz1Xqtbnd7Gmuhc1L46fCTQdInv7jwZ4ohs7UM0s32CTagA5JJk4r59+Jv7S2n6h8QdM1L4fvO3hC3sc31pqkRjeRw7M4Gc7dqsnzH+8B716/wDGa40fX/AdxomkR2Vvc6zcQ2mZYfJ/du4MmTtH8KniuOvPhb4mWG/0XSI9MsPDurW9rDqFrE7DzyLlWndvkY5EEXlgqRkSHj0n6xV7gqNPsdFov7SHg6xtkkvrTVEkZmXy4rPzMYcIOc/3iB9TXRaJ+0d4Enm3vb66vIKqdMYFgSQMZPfBP0BNcxa/DW8hVV/sezMiCAvJFPKgRgZJyPu9A7RD3GeldnoE3jDQdEtbY/2Tf+Rb5N1cJK8rsLRo8kg8bS21fTB65rT6xOxHsqfY7Hw3+09oV/YvPpHhXxZqtlE2z7Rb6eoRztDfLucZ4IP0IrCuv24vBjatfadLovimz1Gwk8m5tW0reyMcADKuRnJAx15rrNJ1FLyO0vNRt4vtSwqk3lWzLFGQFUlQc8YRB+FeRfCn/hKVGo6jb2Wkyw6xrB1VriVHLhfNkKgnjgLtHA64PaslWm3qaunBI7R/2xvB8nyjTvEbP/dXSm/vFRzu6FgefY+hp1n+2B4OmwVsfEQ3bcbtLYZ3Egfxex/AZqKyvNdVoY5RoaTJ5JeIK5wFjk+nQsB9TmoZP+EjaO1leDTMRsrqsYkADC1aMA4PIy7cVp7aXl9xm4x7E13+2d4Pt8GLRvE96QA5+zaUz4UgkNwemKp337b3hC1vrOC78O+LIDeb/s//ABK+ZNuN2F3ZP3gOB1IrRGm6rq8FzHqsFqifaI3g+ywOQVCRKwbrgYQj8fz53VLHUJPjNo13pcFgI9G01P3dzE2FaWfLugAHRYV/PtS9tK4+SNr2Otg/a08INjdo3ibPJAGln5sNt4+bBy3yj1P0OJx+1x4RaSNF0LxQXkKquNKyCS+wY+f+9kfgfSpLHVPFcb2ZSz08Kv2fObeUBAksjMc55wpU/U1PY614gjubOLy9GiEf2bdH5M2Y3USDHPYB1I92JputL+kTyR7EDftXeD2i/d6R4kmk6mFdLO4Zbap5Pc5x7AnoKz7f9prwpq0gVdA8VAuF2ltM4JY4X+PoT0PTgnoDWn9q8a2q5itdJnkxag/upVwqxyK5467d3A/2jVnT5PF0djaG4h05iFthLi3m4CwsrgDPTLAf8CNHt5LZ/gHs4vocVdftH+Hg6eVofiKUSfcBsAnXO3q3Q7W/AE8iuck/bC0LTpp473wd4stRDGZnZrAMuzGd2VYjGPXFd/JfeKUktZbi3sFjVozP/oshxi3aM7ffJ/n0rP8Aidaxt8N/EVjp9jturyCRRcyWpTYXKoAWxyqqTxSeKqJ6WBUYNbWM7Q/2tPD+rabDeW3hXxVLG678LYITgHaeC4P3uB61vaf+1RozXPlDwh4syG5dbCMgDdtB/wBZzliBxnv6GtDQNJ8WabpdtGDo6pGsSRKkUr5VZw2TjHO3J/Grmm6v4gtd0zzaaxSSFPLSymO3bM5b8Qr/AJmn9Yk+v4C9lH+U8O8aa18OfGXxQ1fxn4w8G+KPFo+zW0WnaDqcQjtLJV+SRhiUjbKyjkj+9wRzXpngj4l+CLnw7dHw58DNJtNtwkUbWemW/knCKxR2dUJYFgDjI75rYgs/E+tXzR3U+lxW00NlE8b2UweRYfOZlOeMEvGPXk/Qdv4G0qfRNF06C4tIJrmGP96scDeXkqg43ZycL/nFedOTcnc7YRjax4/ZftCeEr7xlrOiat8J47aXR4UNwtn4eilKTNtKpxkYIfjHJOBXh2reNvBPijXH0+f4M+G7l2uZIDNaCOO6ZVlCMdixj5wzAbc9WAzycfSfhGz8T2/i7xpqtlLplrBqWss774JZJf3UwCqSBgAIgPT8utVfC3wX/sXxJp+sSWliuqLcTTm4jtXADzXpuHxx/soufTt3pcrS0QuaN9T5F8ReAfAv9rTXXhqDVPCGrbFaCPT7p7e42F9gYAuRhnwOMV6R+x94o8WfDvxVrc19BfeO/CeoQeXH5OPtMdzGWKl3J8vlBKGyxYnaeAGz7vN8BTqXiqDxBrA0uXV447SJXWCUeWsUsk5x25doQfZR6V03gXwjcfD7w7/YbQWs9lgTMLC0dpWnZP3hZjjI3O+OO9aRqVKb90OWEtGhL74mvcTqyfDHXSG5ZhqFkcL64Emaxk+LVpea3Bp4+H+tLJI4QZu7UkA/xYEmcAZJx2BrvNc+JFt4Z0+eWXw9fSIke91s9OaQhcYxjI55/GvJ7f8AaS8Ff20JRoWsRz4CI1vobJOpPGd2cjgkEe9a/Wqq3t/XzJ+r07npPxM1y3T4b+OIrdre51G8026t7V/PUFfMTYCD2AHfkDFcD8M/At5BbWGn6n4X02O1t5HMN2l5FLiFLiQRKdqj5igRs/7Q9Oamq/tOfDYwm01Lw/4mkjYtGfO0p2jyhww5bpkHjvk1c8PftgeAdYmuLWx0PxbbrYGMui6QFJUjgDax4wvesIu15Jmr1smdpH4X0y3UNJpGnRqGxtODysTnA46Zbb+HvW3p0Oh6THDHNBpsVvAzyNHIwXdI4jTf067YzXAyfteeG7+4ljt9M8VLLCGBb+x2OxQ3JIB557f/AK6tX37RngnSrVm1Hwx43n8rEks39lMC7dTj5+nIODRKXN1CMbDdLt49S8WeItTttG0y8iutWEsdxLOiYCyhR2JGEw30z6Vt2sN9D5EqeGNJSEiBZQ1yG2f61GIYL1C7e3cda57Rf2tvBSx3C6f4U8UCKaRmfzNH2M7ADOcMT0wPxNReJ/2vPD3huxkvbvw74xit1A2xrpwbdjAJGWAJ+YfpVXukrkuOty5+zv8ADXRvhVax2FtZWNokdjGst/cXTSTyyNFhyxKgdSw+UD8a9D+K2pW2pat4MXTNLsr8RzXDiPzgieYHgxtJU/NtDN0/h6ivELL9tDw3q+tPY2+heMvtcS+a6tpwwqry3Rue35109v8AtWeE21Cz87w34zlu0ZnjM2ngtlh/A3mYHHt/hWco21bLT0sjoNL8FwWLMkvga3ZHlX95JqMgIBll3KF24Cru3gf7RHQ0xtC063toi/gXTbKSaIGSSPUHOxmhkBJ4BOGOPff7CqWo/tdWNi0sI0Lx/KV+ZnWwUBV2gkE7s9COQKq6b+1ho15M1o+h+NLpJGyoFhubk7sZD46e9YuEG7mqc9r/AJHY+OvE2iWfg3xBDAsF3fS2kyxJGx+f5T8mSOBhT34xWB4FvLTQNJ0/zvAmiRRiOAyTTTqVG1mjdiSuPuOW/D8axdc/aW8Oxxm1u/BXi++t7qJovLOnFWKEEtkb+RgnoOa5jXP2l/B2laNNpdx4L8XLpEsQjMEdgpjaFxjbguMcZ681TUHuT719zsbr9oixKz6bY+FLW9u1jVZF0p2YxMLdoD+8RAVxkEMOgY/Wvkz4zftM+IvByrpWkamNPmdWkEEOpzXzhWbAaRizDAzn7y8qPlNcLqv7QWreOpNX8HaP4P0mfTHnd7eO+hmtEa0HyhpIftIBlB2jO4j73Holp4f8S6X4e0/TLTwD4VjtrPbIZjO32u5kzuJ8wzYCk8YIYj1541iow2M9X1KNt8VvElp4Vu4NO0B9UumzKPE+u3X2qdCzAlyJVEWOW2gqzAd/XL8I/Cnxn8ZtUa4mTU/GBXcgKIDDEDywE7rtXt90cc46V2Wi6b4+bS7hrnwD4b1y7luo2jW7dnjtBkkgKbj5ht6AEEc9e3Wt8VPip4BvoLZfDulT2abC8MNzOnmpu5SNDdAR/L8v8Xr7U+bswsdv8N/2I7zTTHc63d2ehblbMOjKZbksCCd1xISwznnYR0HpXvnhf9n/AMM+GLErp1rAkkh+e5mBmlkbuxdiSTXy1pvx6+LM0d7M/g3T283dFZQtdTL9nJcYaRvteHATcCAFJOOlXf8AhenxZha3hTw3pvzFmnu/MlcScjaixLe5j4B+Yk59KFKKE02fdGi6btt1tglvPGgChiMFwABnGfat9fCen3UPmfa/ssoJBQAhTjp3+lfnvdfGj4ytdXVzZeGbVrDzJDb2P9qTLLHwMF5GulBAPOAM89adH8WPjtfQ2ltb6PZW90jCaW+XUJfKEe3HllBelidxzuyB7VLqdmUorqj9LbOzRLcxyzq6tjaowO3P8uvvS3WqWukwhkuYwE5YvIABjH51+dFr8VfjfZ67cz3GjWtzp+1UFl/a9yXuJAv3kf7UPLyecEH075qK08e/Gm3s5mudJsdSvbqWMq1xqN0IrNQ3zxsi3eZM5HQgcd+lQ5Pui7R6Hvl5r83x5/aGigRbvTPDXh6D5FuoTFJdysSWZQw+6SI/rs6jcK0Pih4wng8fafbWim3ayhkNncEecqO8Kk4XP3tyAfUe9eJw/FP4xR32mn/hErEWkUQa8/4mdwzXpDHIgH2390uOBvzj34xxfiT4m/F7WNSubpPC0NkWR4LbTbfULkNASw8uWdzdkOQu7OzByRWHvN3ujW6StY/Rz4V+MrvUPC9ib24e4nkgjkkkuIhGzMQCeMcYPUdq25PDGjzabfQSRzmC68wSsbglijckA56YyvHY4r8s9H8dfFvQ9QM8nh6LU5Y2JnuLi/uniIGwBI4jdAq2A2WJIOe1dJb/ABl+KWsX17dH4fwRaXIpS0sX1CZZUbbw5kN1t2hsHaBk9M9TUzpuWrYRmo6WsfoRZ+GPC3h//iVWcbrp0ewR2/2giP8AiJ6ckDd056D0r4z8Y3Q8YeIPBWozvJpeti/SaG3mUrCI45JonMUcjbSdh3+WMEg7ue3mKfFX4s2Kqr+DNMk1AyAtd+dcCGMBTkeX9r3F84+YNjrxWrf/ABy+L2oatbY8FWj2AEQnto7u582ZsYZkc3IVR0+Ug4AA5xmqVNp3TD2kdj7C8I+Mx4qvG08IyrZBoZ7o7HCyLjamAeCUG4jtXZjT4pVby7iNwvyueNwPsBX5+xfFj4xmzmEngXTpL5ZP9Ekt7y48q1ySJfNU3fznZjG3HOarWPxC+NN5dW8ujeFP7PuYkd72WO8nVbzL/KIs3PyYU4y3eutTla1zn5Y3ufoTN4YjgKypdIJARlivGc8j3q3daAjbbhLVsScrtYAcnA618J6L8Ufj5ZjUopvDYdGjYWUT6lMXhfIKmVxc4dcA8DByRV+4+M3x9isbe3PhWOa+ikYzXP2y6MLrgbFRPtYZTnPJ4GPpVOp5i5V1R9rXHg2MyhjKsUYBUHcTkjqNpx9K4jxX8AdB8eNJd/Z1tr9OYr6wYxXHHuuOevB618n6h8dPjiusLfr4OuPsSsSlk1/M102YyoLP9qK7Q/OOuBVOP9oT4/28ZaTwkyXZKMZIr26+zqmDldou8ls456dai992NWR13xC/YsudSjvpYvseu2s4UeXN/oN2SPmwXjwkpDYxuU9DXglz8O/F/wAJdbb/AIRrXJPApwyTabfWyQx3ZzwJC+6CbHbevr+HbXnxs+OWrTXUkvhu+gswsaC1S/uVkZuhZGM+FBJHXNeSeLte+Pus60q3cmtRaY5XzdP+0SvAgBBYHdIWPHXa3PbFFuzC/dHceIPjx4t0uHR7pfDc3grUrGQSHxPp9wsUVyVDAB4AxAhZihYRyKOnFdr4K/aq1rxhHdT22rXOrzFszQWt+6vknnCsocg5I+VH4wM1wGm+NPGcdlZ2dn8LbeLZDL9u86a5dLtiefKzcbR8pHLDqKZql9qmpWOo2eo/B7TriCYAxQrcXI2hSGUTkXPK8k/J3VeD2qMrb2E9T2jR/GvhS+vJPt/hGxt53JGLzhuowCQnBz16HOKnbwL4D1jVrN7fSLOzePma1g1GMFh5U0e1sj7paVW68bRXz9qf7RMPh/UNM8H694EttN8likshlvZ/s8TKPLa2VpixPJ+8SB6enQ+D/Fnw9t5YZ9R1TxHf+TCRO50SJQwwQN77CxI3dSeuKmVOD1ZKc77n6CW/jjwlqXgm6sWu9OuJZtJ+zSAXquqj7OEKYJ/DPvmvM9B8GeGm8MwRWvhYxqVjDxjUYQjAShm2kA9SxwO4GMivOfAfxp+Gfh2OS2t7jxHcCfYMT6IwPC4wNq/MDwOn/wBaSz+K3ws0W4msobnU40mndI4ZPDjbo9xBdQdvGO3WodKG7NOeXTQ34vgnZeItStIrjwpqFrp6y2swhbULeRNwNxFKQcZOQ8bY44xXqvwh0fSPhd4ZbRL7dZ+YbWcRNciMvJ9kjic5BHIaJuPc15tofxP+HHhPT5LPzb61trnd5hGkNvLkHJB2cduM4A+lblv8dvhveWaXNvqt/cQkbg02jOo4B5A2f73p+tNRitnoF31Mv4pfC/T/ABt8Utc8RWEf2xbm3tJBNb3SKGeOS3P6CNx+Ncxof7NcGkwW0P8AY97JBFcwuR/aKzHC6jcM4JYDjyZVP/6s11dr+0N8MYdRkebUNQaTBiEKaA+1I2bIBXy+M9OT0rCuPiZ8IdV1671CXXrv7UkgVlm0Er5LBcZKmI4JGOo5AFX8zOz7kXgL4KR+DdR0m8udLuIisdvBLNIybFb7NcQysMNkfN5X511Hx++H+jeL/hrBa6fZXF3dWV0l2kMM4kcERsCV3P04x+NY/gv9qj4K6lp8ugx60920Ev75TpBjBIJxnEYH8I9+DXYf8Lk+C+s2ptTcW8asDGB/ZThm56hljz1OKlvW7RaWm545YfAOazvGZtA16O3hvFYfcH7tNX3Eff7wTH8FqbS/2efL/slbnSNclSNLOGZSqEDb9st5ZGy+CDvgbjJx9K6bX/jH8C7G5+3NrumwEN5LyNpczFkCjIOU5J5GTzXVeG/2nvgRcWcKw+IdPt4LRfKiT+yJVKLgAY/d8jgfrT5m1sO1j0qzj0rUNBtLS/tcedpSxNG7Axo7W4QqydMhif0PevzIuvgT4xsplhOj3LFSyBxBK2QOM52dOnQ4r7yT40fATVLeVpvGNrKrOCFaxkAVs8ZJi65xx7VymrftS/CXQ9U8g6rp15an5UuNrxDf3XayjH4da0pScdImdSmpK7PjVfgZ4zeNiNMdcgjJVww7ZGV/nxjNdppnjT4jvq114esNR0X4P2tuRLcx2sDXF1vZQDIoVOC33sAqORX2v4a+KnhLxJodtqOmWsE1nIu5ZCQNwPHA6+tcV8SNH0bxF4u1zU/7Os/L1Gyija4llVGBiMfK7hnOFI/EelXOrUaMlSh1PGdN+Gnw41qxtrv4g/Hbxp4hdmLSpZZthIScdNjseSBy3FdVpvwp/ZNa3vBPrHiS5VYt5k1DVbyMHOegTaCSVPGO1el/C/QNI8DeFZ/C8Oj6bqtpHc3Vwt5c3EfmGOW48wIGKnIVWABz/B0rf0rUoNP1fUblvB+jzJcQRwtHHcQ7MiYpuAP+yEfHu3NYc07/APBLSp2PnL/hXH7K1xe2tvaeH/FMM8zMsc8eo3T7cAkMQJC3Y8AZ9q43xV8IfhDpeohvD3jXxx4Qe5lAgmn88QSHHTLoGPTv1r6i0zSdOt/iLF4il0O00sNepKXSWMrGHWaOQ5AHdkIP1roPjBFoHivwvp62+n2+r3Om3sd6lt9qVvMIVgcls+3GKanJf8Ox8kZan5heIvBfjKfXtRn1KZ/EDPIqw6mCqm5QDYrFc5HC457jv1qhH4B8RShHGmSvG43BoyrcZIz19jj1r7b174BLqXiC4vodKms9swZII7mIBhDqQnG0Z6PDJIv/AAHPbFVdD/ZjaxmszN9rW1tpbQyxm5QFhDezBv4v4oZlH/AM+1dCruxj7ONz4juPCus2y/vLF1GMlty7RxnOc9P8DTm8C+IQnmnS5vJ2583HyjgnJPQDGDn3r7IH7OcGmR6daTrcTC3WxSfbPG3mGNbm1l4z3SSB/wAG+tfSvhnXPD2oeF7Ww1WGC2uP7MSymt3uFBBEXlsCobBwB1xR7aXYFSj3PyZg8P6jOislo7o3AdeVPOMhuhHB5qSPw5qbKGWylIJ9Acc49a+vdH/ZpuJPDxms3vmBFwkaxEEkLdx3MWPmHyhFeMjvn8K0Lz9mkW95eLazXuY5J5IwxwW23yXUa8tg/uy8fv8AKOKv2zM+WJ8Yx6TqDMQLGfI5K7Oe3H15/lWja6Dql8xFrp0zsilmXbggAjJ/UD619a6v+zFJHfLJbtfy+TJM8bDBVlS+FwgznkmF3T6gemKST9n6SzWEtNqNxFG7L5abQHEWoC4VTyfvW7umcclRT9uw5I+Z8ntpWpQ4NxYXCRtwGMZx9Pr2pqwzeZtSCQSMMhccgV9WR/s/XFizCN79lgJbOwbT5N/5uOT/ABQSMD7gdcV6p+z58PdO+Ht9rEGpwyH7TE6rcXSIgbyrlygUn1SRSfXHtSeIkgVKLPgq3tb5GWP7PIZGXfgcnb64FbVvZ6hDGrGzuEBGS2w4r7J/aQ+D+keONe8PX2ggRSNp11p7/ZcHDlSYWYAjkOR+FedN+zzqNxZXcttb6tEskd0YVNuTgyQRyxZ55AkilXH+0PWq+sPsDox2ufPtxJdyKqiCViTj7p61i3H21lz9kmQMcAupAJPQV9P6h+zvfXNtdSW0OpEqt20Si2ILEvDcwjr/AHRNGfoPXFV7P4AyaTq1tf3dnfX9pZyzXEVvJa8PtulljDc8/upHB9Ni9aPrDtewlRjex8vTaTqqRs7WE6qOpYYx/k1lzWN4xf8A0WUhW2nCHj/69foz8Tvhr4f8Y+BfEGmrYmF7qEtBNBGgeN1YMGTAHT0zXgt5+z9FfaTcPbX+pfaLgsIWltVVVaS3Cx5AbqssWM/7Z9OZWIcuhUqMY9T5Wm0nUcMTYXICjJPlNgceuKg+w3jNtW0uHOcDER/z/wDrr6j1b4J6hAl69r/aUyzRXRhWG1MmcwRzRAgHgb4p4+nO4dM4qtqXwjuGttSkgXV1RUvHiC6aylgGhuoRnH8UZmjz2KD6U3Wa6CVJPZnzSui6kw3Lp90V558luxxSSaPqKxlm0+6X6wkV+jHwf8D+H4fBSafJpn7+zuJofOubRFkkUtuVjuBOMGuluPA/hxZGWa2t8AYGIIhn/wAcoVZvoP2K7n5avZ3buUFtNuXGfkNVWDxtskDRtjO1hiv1K1T4b+CptJu4rrTrdhPGyBJLaPk4yMEKO4HfvX5ufGHw3H4L+KHiHSIYxFax3LSWy9vKf5l2k9gDj8K0hUcnYiVPlV0cmze9MZveo/PGR0JPYc02S4U5GVyOmO/AP9a2uZWHSdOtQs1O3Eqcc+mP6+lMbH94cnjj3/wpDsMZj+I5FepL/wAVZ+zPPgbrzwjryuB1K2t6gB/DzYx/31XlDsPXA6gnHY/X2Nerfs6yrr2ueKPBjsrR+KNDuLOFc5zcxjz4Px3RkD/eqWUkeSsw7HNNST5uajkZlbDL5ZHBVuvpz75yKAj7iCCCODweOM1JVi20RZgy1LsPp+lVbeV1YAhuDyCOR+FXtr/3apMk9EvtVDZSZPLONoZhtb3PHak019MF+63dxb58s7Fkb5dzMqr0HYFm/Cn6zZ3Fph0lFxCw5SYgkfQ9f0rFt1SYK4sY5WP97g8VBoddqF9YMClhbgsGYNIOQRuOMD/dHX3qKOzvrx1VIIyDydzY47VQtWu4YYwthGq4ztBGP5+lbem313JMu6zihQ/KDxz6CmGxo6bELeZPNt0KScSI0oA68Vs6faSLHLMLC3iAUx4aRSN23qPxOfwrF/tCfjbbxkg8KMdutX7e41mSEO9nDsYkoN456DFMRtWtw1q0AdLeQ7tzgEAHv61a/ti3RdosoppmPUORjkenTgEfjWBNDq0iO4sFVVx84cYB9OtXbO6v7Z1JtI8/72P1zRqPQ6fw8izTGV/DlpdsoD+dcTBWXAYYHPOSV/Kob+TVJiFg0+1YbwPJDqFIzz3/AArMGuauzbYLa0SHAG9nJJx3qSLWNfbaY7S2eTkqxOFX39+tIaa6lHxh8VP+EA1KLTNV0GSW5vE82G4hZdvQgqHLAYBOT9RXQeE/itG18kUnhK8mulRmEcNxArSKRvzy/wB3HfvXG+NNNufGmmrZ6xpdtP5bb45o5SskTY5Kkdj3HT8q4Lwf+z94n168vYLbTheqoaFL37cIlUABccr7/lxWUnIuNj33Uv2ktMstFl1x/DGoCzVAqj7dbsrkMFwMNnAJ6DNXPCf7WlrrFndXMPg6Zvs+N7SXVuojyOAdxyPxxXkx/ZF8TP5ET6LlY16/2mpUfQBPXmmQfsrajGwik0CacZyxXUwoyB1PyY9fzrPmZeh7Tpn7Wlp4imijl8FXEv7trhIjcWucKPvrk9ueRUWsftl6J4fumt5fCmol3kVPOtdRtipbGQu4H0JznFeQj9k3WxI0sWhHYEwxTVQpwRggZT0yOp60xP2U9W3RqfDjNtYfd1QYPrn5PpSux6Ht2vfthWHhPT0e88KasPMG8wR6nbB0G0EbgpJxznOD0FSS/tgWNr4PtdcHhjUJbS4bZ5Ul9b7mJYj5R1Y59K8hm/Y51288thosaSMMtJPrG8uff5P5U61/Yv8AEzRfNpUcyqSIv+JtgRck8ZT19DRzD0PSL79tiwj0mWWTwdqSQI3lll1C3BibqMgZxz2PpXf6V+02kHh+3u7XwjNNBJClxbwrqVpHKyEYIVc9OM/hXztF+xb4gliCNo1ukhOSBqxO7/xz+lX4P2L/ABDIXaTRosLH5Qb+1jlRjoMp06jj1qW2wVkd/dfttW+n21/eJ4Quvs0Fy0Ez/wBqWxDSnJAzznjPArQ8PftuQeI7xbO28H3K3SxvIyyapbqFRMEs2fu9T1ryu6/ZD1a1kWGbQbcRRAMI01Q8kjkk7Oeg65pumfsd6rcMsaaKAZFO9m1U5bnkZCf5xTu+waHq1v8AtjabNqU9rL4WkaeHaq3C63arHNkjAHGM/MOhNaupftNQaFMSnhJYpYQFmYa7ZmSJc9ZP7oJ/DmvLbX9ijUbfMseh2ST4ynnaqzYOMZxs+lJL+xXqSps/sWza6JDSZ1eQ7/myc/JzmlzMLI9Em/bKhjmhRfDLSLM7JC51+32zEHGVx1Bzjis+f9tq2W1e4/4Q9kI+aZf7ftWdPm2fMMcc461ysX7DutzSSSNo2lrIwG1F1ORNgH935eOecjnr6mrT/sK30mFXRdMto8hjH/a0rHcBjqV9zVc77BZHomlftXtqGlW12NCVZLp1jt42161DSlmCjaCeRnqcVnWP7bqX2tXWmL4TMD27eVPcz6/bCFcNtJLlQB1Pf0rloP2H7y4uM/2Hp6yKoG9dWmGAOOMJx+GKmf8AYRnjmiY6DpSRqAAn9sXHzEdGP7vnvS9pLqOyOzvP2wF02404r4Xgn+2KZLeM6/bN5wzwQAPrz0qlr37ciLcTwN4UsbhLXan2keIrYwpI2eCu3kjH6Gsdv2GZJJJJP7G0t5pRgl9VnJxgDH3MfpVKf9hW8t2gP9iaMyRH5UfVZx+Z8vnPvUczHob/AIu/as1HQY47q88P6bNeeW0ptrfxJbeYFVFO/CqcZBGMjsam0H9sC5k8N/2i+haTBayl/LW48S2yyTyKR8ijaCTlh29fSuQuP2HdTumYHw9pi7m3O7atO5b8dmeMDpWvb/sPzr++TStCEiIQqvqFwdmfRdmM++KV5D0H/wDDbLW+tSaXL4M09JIMySTXPiOApC2cHJKfQcZ+90rpNH/bwv8AUp9L0+38Hab/AMTPcIY18RQA/K5UHHl/LnaTz2zXML+wnbafaxSz6RpRC8c310VZiDgkVLY/sV+Z5/8AxKtDmMo2lxfzo0aYwVGBwOaNew0/M1te/bDutLXUJoNI0NoLRlaY2/iS3dXZ9xEeVXlsq2az2/bAnhhW8Xw5pr3ckBuBar4kiZ1VULEsNnA+X07ilP7CryTQqmh6HNboMKPttxsXPXtz/wDrprfsLXVik2zRPD8qvy32i8nbdz2JXI/A0JsG0SWf7aU2reFn1+TQdKtRCW8qzn8Qwq9wVUHywCoOecdP5VH4L/4KBXWuapNHc+B9HtBapuae51+JFRWPPzFAMAkDvyRWdcfsZ3kMy3Euh6MkrKYmkW+ndBxwAMAL+XapLb9hMwxQKNK0aXbliPtdwwb03ZPPf86evVC5uxoeK/24Fs7y3lPgbR7wX0RC58QxbHiLshOBH3AODXzPo+m23jD4nR6T4fe+jsh/pOm6fZ36XwtmYGSQCTchO0jgsD3zX0jD+w7eTWt8tvpehRyMNr7pJgCDyBwPbr/hW98CP2W5/hf4+XUrq309pbWxkRI7aYkgzYGS8rAcbT2zzU6X1Q9zwef9mfxFcX91NJb+K5ZLsk3V2Ei3vubJ/wCWmME4PT8aJf2WfEu62NhpviRVjUbYFjjCowJKsP3nJ+tfofJayLbqE0re6IACt9bHOBgk/PUtpe3Njblf7HZgDuy1/bDn/vui67is+x+ddx+zX46tmu9Quo/FkE+o5iuZ5IIlMuTkrkSHGdvp29OKqy/s9+MrxLPS54/FBsYWaSGBUTapbqc78novXpiv0i/tqa+s/Lk8P+aEO4Z1G2Jz9N59arQ6pLIjM3hiSNk6F9QtunqPmo5l3Cz7HwZD+y34jVprhB4rW5nUrcXGyISMGGCoG/AGOOBn3qKT9lnWtdtYrG4s/FZ061LNHbtFE0YfABfmTJJwO/b3r77j8Ty2rOz+G2bc27cdTtcfTlqguPF0qsI/7B2fKxJ/tO1IH1w1K67j5X2Pg+P9lbxNDfXN9a2firz7hSkt6scAmCMNrIPm4BXj2qpF+yPrkbrEdM8SW1jHIZFh2xFCxGNxBkznGO9fe/8AwsR41WNPDALfL01S2H1Oc/pUVx42nmuol/4R4RiRgfm1CDHHYkGjmXcai2fC0v7OPiS0mu9QB8RTag8YRborAJlTbs2DLYA2DHTPSq2mfswXlxpT2lzYa9HaxP5pt3aEJI4UgO2HBJwSOCOvSvufVvEVxbykf2BAy+q6rAQPzNZUPipbtVc+HbecoPlUatBxzyOvXioc0upXI2fFOufs7+JpNRttU0+PxFdXywrAZsQEwIqhFCYbI+UsPxNcfqn7PfiKOBNOTRdfMDSBpxiM7yDwznPJwT7e1foLJ4+exkcQ+HoIXXIDHVIOTzyR+Nc/da5fzeYo0e12yAnedUg6jOe/+c1UZeZMos+QPhb+z++mfGrwTLqen3MGjfbFWdNRdDEqCNyQfQZH/j1fdp8D/C1pJFGmeGj5Z4RzDwOT6141Jr7p4y02a+0WCDSoIpJLmZrq3uFG5SBhSTnB9u9aMvxT8B2mg634gNmF0/Rwq3vmadbxyoSVUARsisxO706Hvmq5ltuJQe512qaH4EXxJp+l6ZB4XtoZYpZtRliv4lkh2kbMJzu3HI6jGO9WB4N8CxyNCsuj+axVfnljAA69c187D9pb4Nf2w2ordtHclVUs+iIwZQc7T+5z1P61szfte/Cm9mVGuEcE4CpokYBP4w8fnVar7JOnc93s/h54Jsbtti6OWkYk7JYyD+R5/KrVz4F8E3UaKtroqOzZK7kUsMjqSe2P1rjV+LvgbTXiDRy2U67Q0j6da7Iw3A5VCM7hjkj2zWf4w/aE+E/w38R3OieJL0x6nGscp2aVHOpV1DAho42Hf61PNzbIrl5d2ehHwD4UjaS4li0V0jHDM8WMe3v2rc0X4b+CI7Np7mPR5pfMOCxizt4I714vH+2J+z8tusL6vMV6jGg4wf8AvxyK7HwF+0d8KPiLdXkGgutzHaqhubmbSYoY49+dvMiL/dP5UPbWIJXe56C3ww8BXS/La+H9jEFhujyx6881fh+D/wAN7loidP8ADzJHk4JXOT6HdwK82m+K/wANNN0LVtcuBG1tpPz3eNMhDxjOOEZAxzkHgdxXFTftq/AmRtyas0WRyv8Awj4I/wDRHWp1lsirKO7PoO4+FPw6hikW30/Rd/U7ZFy3Pf5uapv8HfAU0i+do2gFjkjLJg57YzXg0f7a3wLjVlOphlx/0L/P/omvVj8Uvh34au9IOtTw2rXrKscZ0qGRk3KWUvtjOwHA5bA5FTbl+yO3N1Oth+DHw6nU+ZoehAr02FBx6dabqXwa8C/Z3KaNpBbbkbcOR6cZIrg/id+0t8HvhfrI0XXtSSy1RreO8jUaIsyNG5O0ho4WGeOhx1rhY/21vglDcO//AAlUBRudn/COS9f/AAH6VSv/ACicV/Mes2XwZ8GOjNLoGlqf4hsHJ9cHj8qur8FfA+4bNI0pRHyjArkHrgjNc18Of2nvhJ8T9UnsNCv4b65t4fOnc6MIUVdwUcyRLzkjp6/lvH4ofD2/sPEt7YiCSLQxI94raWkUgWMEuyq6LvXAOGXIODjOKrmto4kcvZjG+D/guFSDoulzcbtzBTjnIGM9jnpUWk/CHwc2oQvPpGnxQbxkAKS/pn0GTXmcn7a/wE3CSDxBGh67X8Oyf/GaS8/ba+Bsg2r4is2BGTu8Oy8H8IDVa7cpPzPo5fhH4EaJRPpukKFIx90Zxj/OM1yPxE+Evg23tbS503S9Kjn83MkkRUHbzx1ri5vix8MrfQ9K1q7mhgi1ARz2hk0VZPMjcZD7VQkL/tHj1xVX4lftAfCz4Zvptr4n+yWDalA11bSR6OsqyIG25/dxtjn14NZxtfRGjWm5Zj8B6A29ZrGxLctgBDt+nseK09O+EfhW/s3lksdM35KsmUyAOhHPAryhv2uPgYdzw69p5MnDed4elyPf/U10XgH47fB34ja49jo0lrqeoRwNcTJbaG8QEakAsS6KDyV4GTz7GtZXir8uhmlfRM7r/hSfgaeJtulaeW+98jZBI55waur8E/AS2Nu0mkWkr7A7ry2Dx78dKZpHi74fagt/a20NvKdMie4njj0lQURVzv5UcYzyCR1rzax/bE/Z/it2ZfEFiC68I2gS5B9D+67f0qYyUtkNxcep303wV8CyXTCLQdOWMqAcggnOSSeeTTl+BvgZ9kbaHp+4/dY4UdDwTnivP7X9sL4B3F8Wu9d02OGMfKw0GVi2B1x5P14r0zTfiJ8KNY0eDWYY7JNPvIUlhmudFKebG5wjgbM4PHXGKUpcu8Soxv1Pyq+MPgW70P42+N9PjiuIobXWblbZ1jY5i81tm056bduOehFN0Twrq19biL+09YSbI8kNE+E55x+8x1weR2/Gvpz41eHb+3+MmvauNL2eHdbkS50i5t2jjSe2REQsqFvlOf8A69aWipCtpsg0S6MzjCzGWE44/wB6tLprcy1TPAY/D/i7+0Eex1TWlu5kZbiaOOU+Zu4OB5nyHjquDWpN4L8aqUSS88RMilpYEC3OYnIG5hJ5uTnaODxX0hptreW9xp6rpV3Oly7CNopYCBgfxfPkd+temafZzJEon0TUJF2gYEsHPI/26Hydw97sfIljofxF1VxcjxJ4q+13KNHcy/ZZmBVl2ELH5m1OP4gM571pQ/Dvx29ommRa740XSvNZhEtvcqVJAUneJCxHH3TleTxX3LpN5Pbw/uvDF8CO8fkAY/7+VvaN4kvIx5cvhzVGIYsGV4gPx/eVD5OjLSl2Pge8+GvxIt7g6hbeI/FDalMPLnuvsc4Uxhdg/d+ZjO3HI5zzmstPh344tY5rWbxD4shs5pFubrNtd+dLIBtyZQ+4rj+EkjPNfoJJ4+3XU1tL4c1ZpQWjDIsZUYzz9/2qFfGcT20sH/CP69uY53tbqQemOj9OvFL5jsz89PDfwv8AFng2/a90TX9eGqTOZDdvZXAXBBU5jDc8N1zkH8q1LXw38T7axm01PF/im5svMjlcqt5525Sc7ZMkqpzyB6DmvuTSdWh026l8zQ9WkV2Y7xbkvzzgZbGOK3I/E9qGMcei65mX5vmsyemMjIPXkVVk+pOp+cPiLwh8QtYYfbvEuvXWxUgSQ2N2IlUZHzIfvNyfm60QfDXxfoukvZ2XirXIhcbftLSW9zvYL0EbbflX257c1+j1x4msodwbQtcK54P9nO31Bwar6xrWnG3h8nS9ZU7s4ksJMDI6U+XzC5+dFp4f8c295bf8VjqpktVV4ImsbowsytnEi4+cn1yOlcT4wXWNH1qPTta8RatqVjeS77z7Jbv9phbO8LH5m3buDcDJ4HcV+mdxeWVxljpmrq3QEWEoyfbivhL9sr4Ta14g+MTaxpej3T2+o2cIxIv2dzLGPLZijgcY2dKqy7iuel+F/wBqDw0ujC0tPDev2UOntHFt+xhmTAAUE+Z1OST/AE79jfftVeH9Y1i1sJvDPiO4uWVtkf8AZ6vuDLj+/wBf8K+LLX4A+KbZo/M0S9zIpDIJYsEAggMN3PIB/AV2Xh39m3xO8cbPpOsfaIQpinjuoQ8OOgR93yjk8e9TrsF0fW0X7Svh3QlhSbw14jiW5XMEi6aBkHHH3+lasX7Sui3wlmsNC8Q/uXVJFXS/4toz3OPlwfzr5lt/2RdVuLVEHhjxAIXAMlvHdQGGRwCA5Xd97BPOavWP7H/inT7qS4ktfFUVxIhjM0d5AJGi27dhO7kYAHTtUK/9f8OXdH0jJ+1F4a1DSfMl0nxTHbt821tPJVgjDJGDzz/OrX/DS3gBYfMTQNeiVQIvM/smTIZyEA+8eSSOtfLUP7IuuyAW39k+JrbToi7RW63EOIXYAF0HmcdAeSRmpLv9k7W1u3VrPxS5ndZbhvtEJ+07WBXzMOBkEDGMGnqGh9L237Q2kazJHarYa0btS2yb+w2+7yGHJ4AAx+Jqm37QnhOznglWLU4hdKHgc6PId4J4x1Hr+dfOjfs16+WWJD4tSe3D/Zna4iBtwSSQrCToSe+eKy7f9mLxBHClrb2HiWKJUX/RtyNDIRnBOJsg854wKNQ0PqKb436Tqc11difV4rG12mYJpEv7kMpILcdcEmq83xO8C20en3kp1eO9utzRb9FmPmKhyTnjse/rXzWv7P3xIs7rzxL4x89ownnRum5kVdoRh5uCNvqM8dap6h+zz49ulso44PGC2FvuMKjkQM2NxT96Tk4HUnvReVxe6fTUnx+8JWK+bpupXVtCgAkjm0G4O1snkFR8o5AxzWt/wv8A8M29wRPPc/aFwEB0mYqWwCCMJn0r5TtfgH8QlupzM3jA3M/yTTbNpmTjAYeb6AcjB460XfwD+IEjReTeeMVa2JeCPyWYwsT1V/Nz2HBJp8z2FofXdv8AGLQbiC3ltGmZdx4jsJBlgTkD5OvfvVC8+OHhPS7hvPvJYECFxCdPkJXBwTnZ649+a+YT8K/ivDdTCw1rxpBLdI4uysEjLJuIJIHnYQ5A5XB681FqHwX+ITKJJ9e8cb4EKRedDIzRBmDbc+b84yBw2elTzMeh9N+Ifjh4LuNLYw6z9hRHCvNLpT7W7BQPLy309zVbT/i54TheJb3XUmgWMNEi6W8bDrjgR9frXzVN8LPiHcW86ya14tkhugv2mM20pR8HdkL5h2HIH3cVWu/h58U45LUW+ueKpzZjFrK1lNuQEg7W+ciQZHRgafMxWR9R+Jv2gPhfrWjT2reIfJjA2MY7KdV8wHg5EX97H61nWnx08I29rG9xrXmPDGAZUtZsDj5Tt2ZH3f0r5il+DXj3ym8zVvE0Udw3mTxx6fMTv3Fwy/MTHyf4cVFdeDfibZxxp/bviRzCqxozWExDRrnAkXo5+Y/MeapSYaH1Va/HLwPqSpGnia2L7QI3NvKjZAzjhOTgfpWnafGrwPa2LKviewezUbTJIk2SvQ9U9BXxfa+C/iTbWz2sOreIYIZJBPj7JOGjcAjKvjKqQx+UcVZfTfiVJcSrc+ItbQLCIHX+zZfKdSpGSp43f7Q59qV2Gh9Y658bvhNDbxGXXdNt5IlG1nhkG3J46Rn+dLZfHr4ZtE1ufElhOrEldvmryPmxwnGOfzr451T4e+OdQtIVuNX1u5SBhLBJLYy5U47vtyw6cVLa+EPHlrJLfRahqsRk3blOnTbctjc0Y2/KePfrT5g0Pr+4+P8A4MuZnt9N8S2KKFXzFQuCvYc7eOlXLX4u+Eo9Pka+8R6dPEXG3yZHDAk4xz9enpmvi6x8N+N7eaKSPVdSjuFO5S2nSkMA27Eo2fOfyqwsPjyRbmF9bvPIu5Fd2OnSIyMCSPLbZ8n05pXA+t0+JPw4uNc3t4hs3uWQxqglZjgAY4PGevPtVLUvHHw7Y+Zca5YRxMu15hKMj0x+NfLGmjxxZ6ta6o2psbu1XymJ02RknTGPnXby3+1+lN1DTfF+oaa+m3WtXE1kcPHJ/ZxDxuAcAsIhleTxx9aOZhofUmn+LPAdratFD4k0W4i24L3k5cqe56jHauf1LUvBeoakkxPhXWZpJ7ZJGvxHcLHAX2OV3jPyrz9Aa+Z5oPF26eR9UgWK6GJYUsHUIRgbk+Q4bA/U/hPeah4k8L28Dp4ptjNE+FiuNP2JKuc/vCUA4z1yOlN7WFofRDR+GbnSoRb+H/AMuoPBvMC2duWLi1MjADGf9ajLn/bT1r1HwX+zj4M1zS7iSawsJJRdPj7NDEESFiHi2AKf4WHWvLP2bfA+keF9cbxP488ceG9V1eRF+x2UMlvstywJZiSoLMAwAxwOevGPpKT4neDNKuFJ8U6Jb+YioNt1EPu9Bwew/pWUoy6FRcZHgOtfBWx0XVNasX8LeH9QjtLmXypZ7SIyvCIkmjzhepUXC/VB68SRfB/TF1COBvAvhdl84Ql/scWD/pEkW77vTDWzfRz6c+3z/FbwbJIJYPEejXMjsELfaoiW4OCee2T+dQSfE7RgkbLeaeN3H/H1Accgf0H5D0rRKbRDtc85+HPwO8N61pt19v8ADOiw6hmKdLZbKAJGkkY3D/Vk5Dhx+BqtqPwtsvBvxERtL8J6H5kD28tnqn2SKOWLeky5GFHKyrEp9pK9Ms/iV4YhumnudX0uyLAq0jXUQDZ55OfUH8zU+pfEjwkpjmi17RLmcEAf6TCzsCwPHP8Ae2n8KfI7aiujxdvhtoln4gvXXwN4dFq/mTC7FpGzyhRDKDgjqySTdO8ZFdD4f+EOm6zfap/aeiaOk7DdFBFZwEZWR0fkoT0Cn8RXpdx468PSRxyGTTmbHyqZosjg4HX3P51j6h8QNEh2SNNZ2W1hm4E0QGCMcnd7D8qXs5DueX/ED4b2XhzX4In8O6PfwPZLOssljCNm2eNJASoXOEk3dOin0rA/4Vvef9CHof8A35FesX/jTQriPzZL7S7uVAwTz5YXBBGGH3u4zUv/AAn+nelr+cP+NDjJC0Ph7xtY/wBmaaZXTaqnbkn1rlNLaD7P824y7jwOeta3iPxBc3Wi3FuzmWEbS27GevYmsnTLy2CgIJJFAB4xkfXn3rue5hHY6CHy2kBMcmAAOtXdo2RBY5Aw5/HtVGzv7ZlVQs2ehJxzWrHfW0ONxly3PBFMC1BGlw4lWNjv4Ix0PftW5Z28SKAI2wozjfj+lYS6/bBSqiUEnJbI/OhfFEQUDZIR/OmhHXRRxrbFBFJmRsnDf/WpcKN2yKQDpnPJ9ulYEfiiBjsZZ1AH8J/z60+TXrWRFZZbgMpwqhwN3sabYWOghRY41AjkAQf3gPz4p1xfwwxsCGUsNoAbOfoPwrn/AO2orhlj5iUkZbP9KnXVtK012kEbvMy83BbLD2Hp0qbjsTXXmtkrDKhC84Iyvt06mvpb4Y+EJvC3hG3jhjgdSnnbpVmeR95DnJCgZ5A/CvmrQ/FWlNqCRSafdXhmZYYI2YqPMd1UZxy3U8V6fL8UtX0/S7Uf2Te2UcRkuHhhSfy0hjLBQ2R8wIXsQRgcGuepO2htCJ9ApDqLKoMdoVYnA8qbpTLfQdSYcG12bj8rW8p/GvlfwX8UPGHijWte8cJb3U+lTKtvYaSL25kt0wwXzEjA5J+bsPwrsfE/x017Q5bq+j07UZbfYLaJLkzxw+ac5IwuVYHjHzDnrXO5SRryo99uNHu4gFDWYYDJ3QSn9Kraa19G4RVsx6kW83r9a82+E/gTUtQ8Mwy+JNe12e9my5zq1z8gJzgDcMAZx+FdxZ/CnT1Y41PWmRed39r3P/xytVzdWRodNJLfpcJmPT3HTHkTEn8M1aWS/wCqpZ7BwAttNxz35rkLr4b6b5eft+sCXPyt/atyef8Av5Xn918QPEFg+padFYX6GO7+y20lotyzsoUFpN5BzghuCQD61Mpco4q57pJaXisJZPs0ZXOf3EuPyzVTy9RmyoaxZTyc283P/j1eA6H4g8TfGT4hNctPqOk6RpSfZJLayv7iETyAgs0gO35hyOM17Xp/ws0+42yfb9ZL4yynVbkDP/fyqV2roNE7GlHY3u13k+xMQPvC2lHToPvVpW0OqTqjr9kyoyFW2kwOOv36xm+FWkQhlluNVj3emrXXP/kSuW8YfavhuLF9EhvL9bqcR3DXE09y8UYViWALH29Pr2qZNxWoJK56Zb6TqgYFREc87mtn49f46kWz1OOcbjbFs8n7I/Pt9+vlfxX8YvFmoW95otjp2oQXevzfZ7eeZ7hXtvlGTGwUHOOeQuMHr1r2rwz8L4rHwuk2u6nqDSQp+9uptWucg+58zJ59PypRvJXKdonpYkv5HPNpH6YtHz/6MpBb3rKzO0O7PG+yfJHr/rPavIvEV54X0PyYle+jMg+RZ9QvJbmXjqsCSbv++se4rj9c1DxPcapZaXZ2+sx+E5gk0sUWmTfbGfcSSJ/O3Kvyj5SAeaq7ROh9I28F8oXY1qDnn/RX/wDjlTst/LcYZoHK8YFm2P8A0ZXlvhfR9Dvoj5yakXXrHJfXUcyDPJMbSHj6Gurb4T6JewC6tpb4pJjax1G4wffG/nmlqx6HYQWOpmRSBbIWHX7Ixx/5E9qJLO/dSsxi2Ly+2zb/AOO14LJ4s8WafcajpbWNwI1vTBby2vmKUhQqd5PfPoSB75xWL4VuNW+L/wAQptW1uO607T7CM6eLS1uLmNJSjkszj5QWzkZx296zjLmkki2lFXPpCN9S8wpHLa7FHy5sDuGf+2tWLeHU42WUS2xY8HNgW/8AatcdY/DPQZV8xLa4b1X7bOAP/H6s3Hwz8OLHgwXCkDr9snP/ALPW3KzK/U7htLvNSRTO0J2nPy2RXp6/vaYfDM/mDaUUtzlbMgn2/wBZXj3iq6uvAV9pcfhyylmtZ5i94xMkkixqjcoXJH3tvXHGea898afEzxd4jsB4TtdLmhk8RXDfv5JJPNt4wVLGN1G5c4HUisOZ81jdJWufVFxZ38Nv8sqLgdfsR/L/AFtV4hqQ+RriEqRjmy/+215/4b+Fenw6VAt3byzXCIN7tezZOMdQWyTV2T4c+HLiYFraVDkDAuJgP/Qq6OVmPMjtrfRZpWbzHhJLZLR2mD19PNOanXw3qG9ttxnjndZDnjpzJx2rzzWPAOlaRp9xc6dbub6KNpYfNkldCygnBG/np+teFXnxv8XaRp+hX91pbefp1u97ew5KwklcFGXH0Pc/rWM5OGjLilLY+tJNPv7OMlblVDjbn7AOex/5afWvmT4j/HvXfh38R9X8Lvdwpq0sLXsF7f2o8hbYsCoCJyxzhMb8jdux2ryjw/qnj3VPBeq+PTaIb3XdWWdY5hMUtYXk5WJHKgfu/Y9c4re8D/BfU/jv428W+M77RLZ4rKKCFop4YJXmk8gjPmXCtgAYOEVRkVlJ67lqxyPxR/4KIeK9JsNFg8NLaW2swvcRatb3lkXgLK4WNoj8pxw3c1523/BSD4uSAgr4f/CwYf8AtSvIPjV4f/s34h6xZLaJYPZlUlRYAu5yAST5S7Op6gCvN24rpilbYyk2fanwx/4KNeOJtZuF8U3Wn2ulRWskscOm6f8AvJ5gRtjyd/BBY9B0HIr13Uv20JtH0ue81loljvtPlltjZwAyWd35YZIZOCCBkZYADLY+v50eB9BuPFPjLQNFtAhutS1C3s4RIoZd8kiouQeCMsOtfWn7XPwWvPg78O7S21KysGn/AHcSXFra2SKGyu4gQxIVJAP4cVlUiuZeZcZOxxf/AA8O+Lh+9NozE9W/s/G7pycN7UyT/goR8WnVh52jAsCN32DPUY7sa+aOKK6OVdjLmZ+juj/te3Hiuwgi0xFItI4XnudQtdgvWZAWjjAClcNu+bBHyAY+YEeU/F79vjxJD4vibwBLHZ6P9ig8+31KzV5UugG80AkAheRxz0rq/wBlP9nW68Tfs7nxpb21tcF57rAmitNx2OFyGlhduiHowHJ4718TeMdi+LdaWKNYolvZgqKoAUBzxgcflXJTivaO62NpTfKke3Xv7dnxV1CUSTXmmNg52ixUD8s11nw0/bU8QF7oa+6z3808MNjDZxxwQoG3bnckHgHZk+hNfJv1r2T9kj4Z3PxZ+Nmm6BZiJpmtbmYeeIzGNsTct5iMuBn+71xXRKMWnoZxk77nsvjb9tHXNF0PVbC3vYrrxEXjfTtTtYY/I8oSAOHQgncQrjBI6g98V5dN+2x8TrhiZL3T3J4z9iUf1o/a7+H9x8O/HFtp9zFHGzCRlaMQ/MPlHWONM8+ueteC1FOMeW9hzk77nv3hn4ueMPjd4o0/S9UdZns2bUImsLUGQeSpcps3qrBgNvzMB83fpWV8fNH1bSblbu/v7u4nnb7PM0kDQqwwH2j99ICPu9SeU68AV6D/AME0NBtfEH7VWkR31tHd2kGm3s8kEyhkYCIqNwPBGWH5CvYv+Cmnw7tVuNO1HRtMstOS0DS3QtoUiDKRhfuge/51MvdmrbDT913Pzz6U5XKkEcEHIOaa1C9a6TE+rfhz4T1/XvhYLye41JE1uWW8nmW08xT8zKoVzcqf4S33MDdwO9fNXiq4uZteu1up3uJIHMAMjMxVV4C/Nzxj/wDX1r9ff2Zfh74em/YT8JS6lotjfXdxps05uLq2SSQbppCuGIJGBgDFfjtrDbtWvSBgee+P++jXPTvzyubT2RV3fhXefBax1PX/ABxY6JYT3kcN1IJ547OJpiwhDSAmMMoboV+Y4+c1wOa+if8AgnxpEOufteeAbW5t0urQvdtNFIMqyizmPI7jOK2ldrQzjoyv+0PoGu+HLWHUrq+vm/tDbbzNJbNa+YrLvCsBPIpHy4xx0HpXz9X6O/8ABWbwtpOg2/hWfTNLtLB5Lplla1hWLf8AuzjIUV+cXbNZ0r8upU7X0F5r63+Efwz8S+P/AIaSa7Jq1+b3VlafE1m86zRwt5JHmG4T5uN33ccewr5HBr9hP2EPBeha1+w1o9zqOi6ffXEp1FfOuLZZH2/apQBuIyPwxRWvy6Dp2vqfk546m1AeJryx1G7lvZ9NdrBZJiS22NioHPPr+dc/zW98QkEPj3xJGo2qup3IA9MStXP5rVbGb3PQvgbpWpeKPiBY+GtOvZLJtZP2eTyy3zqPnxhcE/d6ZAPQnGQfdv2nvDPijwP4fh1ObUbxFl32bj7NLaFY5FKmE/vHV1ADDacAbiVA5FeUfse2sd9+0/8ADS2mXzIZtagjkjPR0Jwyn2IyPxr7w/4KweDdJ0H4UaDeaVpdnprtqcccrWkCxb12SHB2gZ5APNYTT50+hrFrlaZ+WHNJzQc0ZroMT7C+Cug674q+F8niQX9wIHiOk4uLSS5ijhgU/KGWVMBg6jCr/AD83Svmf4kxahpvii40m+uZrn+zf3EQmaTCIfnwqvyo+bOPev04/wCCWvgfRtf/AGc9dn1fSbTVGk1edE+2wrKFXyo+FyOATX55ftUaXFon7Qvjqyt41hgh1FgkajAVSqkAfga54JqbNpaxPK/wrsvhXeay3iq30XRtRm01tbZdPnkt42dzGzA8BBvOCAcKQTjGRXGbq7n4Eqkvxu+H0co3RP4g09HXJG5Tcxhhx6gkVtJXVjJOzPZf2io/FWk6ba30mtXECWqGEW7WNxaSeW5KbSWJVhjscH5iecV8xZx2r9a/+CoHw40DSPgC2raZo1lYXMF3bxma1hEbMpkAwxHXr3z0r8kzWVG/LqaVN7oWvr79n/UPFHibwLLrDa1JDHaoukRqLC5mjihj+b/lkoRflcLySTjknOK+QVNfqZ/wS9+GumXfw18YjxDo1pfSNqiyW/2pBJhGhXoOg5FOrfl0Cm7PU+H/AB/8WPE/hDxM+kSXa6itoMxi881kiWQ+bsjjfa0S/P8AcOegxxVXT/2pfFemyxSQ2GjFozxut5Dn6/vKvftseHoPC/7Tnjawtbdba0WaF4YkGFVWgjOB+Oa8OzVxS5URLc+2/BP7Ud54i0nTIoLfT7jWREHvN1oywRuSwVFI9eBz69aq/ET9ujVdDm08eHdO0u6dlkS+tdUsSGgkVlA2lXHH3vUVxH7G/wAI774pSasllp0F+trKryLPDA/O35MNIfXJwB2+teP/ABx0H/hGPix4k0v7KLI29zta3ChQjFVJ4BIHJJ4457dKyilztWLu+W57pF/wUV8cx/e8NeG3H90wS4/LzK7/AOFX7dWv+Kp9UfxFZ+H9K0+3gBhhs7B3lnkLABQDIeMZ/TtmvhOvRP2fba21D4yeF7K8ha4gurryDEsZkLlgQF2hlzkkDkgc1pKK5XYmMnfVn2t4k/asg8Hw6udbi0yHU/sU9xpLQWbvDLOoJ8iTLfKwJAz0OeCa8Qb/AIKD+KZphJN4S8PyH2jcDOB7/wCc10H7b3wjvvhv4Q0bUrjRG0o6hdrG0scaxiTKSMQdk7jsPlIGMda+NKilZxvYubaeh9f2P/BQvxVe3VtbW3gjw2J3bYpIcDJ7nnj619CJ+0npEmmyarZ2Gk6lp9lIo1GZkMLIDGHdokyxfaCGPIGMkE1+XoYoQwOCDkV91fCP4R3HxT+BWn6ronhyHUIY7KWO4uJ7a4LGZDsJaRblN+FTBwo6DjjmaytZjg77jfir+3tBoPi6S28K6RpXiTQ2t4ZYrwq0DBmXLIVwTkE4Oe46Vyf/AA8P1JsF/AelsR3F24/9kr5O1y1ex1i/tpAwkhuJI2DklgQxBye54qmpreKsjJu7P0d+Ev7ZA8aaKZ9V0TStHZryOysrJZy0lwz5H3jjAyCOR2J7Vr+IPGOlfEDXLZ1ubGy8U6eRDHpKy+fFcQO2WmV1GQoIxnb1HTpXyN+x7pdpr3xFu9IuLT7ZeT2hks08qaXMi9BiF0b+IH72MKR1II9k+JXhm6+BXxL8OXK2V/YLeRzR7ZDPHuwEX5hLJIGALkgAggcc8mueTfOaq3Ke62OiXzHbHYWUigk5+0SkjOPWIfy713fhvR7uK1MRsrWMq33ftMh/XyhXx5/wvDx1pekaf45tTdDTbG5Md1YfaAEu4wSC3IyoGR36gV6tp/7UGowrf3skczxLFFPFbPIi7eQCgx8xPJy3I4+lU5uJHKmfT9nqVzZBIks7Nyo3YN4//wAbq9cXlzdMspsrQM3BC3jf1jrzvwr4c1fxBpMOq3Wvarp014olNrbToyRhuQOUPY1tr4Pv45EA8W61heT+8j/+N1tZkaHV28krqAbS3Tvxd8fj+7q79lnC/wDHhbc8lvtPH/oFcTL4R1u3ty1t4q1veoJUsYCM8nPMRrhof2htT0SbVdH1eG/j1HTgFW6mMDfat23BUZUDrznaOPoKiTcdSormPXbrQzG5nezjVjyVFyDkH/gNV7Cza3uHuDZRBmwNpulwB6D5a8+sfizqnxO1hdK0e6udJSwYm8vrcwskxPARQ6Hp6gdutdUvhnWVZT/wmGrtHg7v3NrkHPB/1PSmm5K/+QNJOx1EzFpiRpsPXH/H2ox+nNN+y3G1fLsoVXJ4+0ocVzcvh3xBtTb4z1BOPmJgtWz6f8sq4/xd4+8V/C1oLye61DxDp8rLEY0gt1MZJ++WCjjjn60tVr/kCs2emtpU9xIZZLRFZTksLhO1LLvjj5sVPBHF5F2P1rye+/aktbOa6UxSX43pBbpCERnlZcgJn74zxuIH0rpdKsfFeoWIu7rxRPbO+MRrZW7FCQPlzt5qFLm2LaitzZhu3huJCdNuVVuuy8hx9fvVN/a58jMmnTH3kuYc8f8AAq5PVP7c0neZPGUsxwfm+x2yxoR2ZiuB+Ga4G6+Ls8Nxb6I3iGxlupm3/wBsC7tfLjAYZQxHDZ7AgY/kVzNahZHr9tcL80v2N/LZ92BcwnHb+/WpHDHKvNtdDt/r4f8A4quD0uz1jVIUZPFo8lwT5hsYSv8A30vA/Gujh0XxKtqZP+EnVyvyjdYRkE44I5rTVmZsXVqdokS1mUxjK4ljwfr81QNOgUiWwnlLHny3i/8Ai64Kb43XGiyapYapuS906Mb55rIrHOcKQUC9Sc4xmqs3xRufFWoQaTobm11GNt15NJaebCgI4XqBuOc4BOMGpUrstrQ7x5kUMTYXYY/d3GIgf+P1QuLhZWEJ06a5DYDB1iI/9DrGW08XzNk+ILEDA2/8Swdf+/lNk0Dxcs3njW9Nz6/2b1/8i1evQjQ6A30NrD5H9kXAUdMLGV/V6Wa8BtwosLpWGCoKx4HsMNXBa5431rwHLHca/JDqGlzERK9hpr+YJCeM4dsjAbt6c1NN8cdC0/z5LtPMgTYGaGAkhmHyqM8McjoucfhUc9tGVy3OqnjikkVjYXYLEsWjiT/4qqLaZZwglrK+2A7gvkKcH1+9XPabfeL9ehM8V3pEMJwyrLpzhwp5GT5o55x0q/JD4sWNtlxo0rY4zYPx/wCRab5nsL3TXtbO0nRvJ0+7i3H7otxz7kZ60x9PWGAxNp908J4IWDH9a5vUpPHGn2zvCfD8rqu7abGQfykqpp3xy0q/sZwYYxcWsqRTrPbyRqJCcbUyCWBwT0x70nPl3Go3Oij8OLNGEisLpUByN0Bziue+InheGfw1PJ/Z0ktykbGIT2rbGb+FSRyAWAGfesrxP8fodH1O0awt7eXT4nI1bzbNy1uOcBSpILYxx711EnxU8Na9p1sAyG1uImlDJGyyFV5LbT0xg9SOnSj2nmPk1PjBfGHiiwvNVspbDw9BKJNkTmAt9nYMQynn5vqcGtPT/GHiRpLeeDT/AA41qqeXcQeWSZXGfnDY+XnHGD0616/qEnhfV9WuG0Uzaiizl2YwEOpPOSMd896tPZWpQN/Zsj885gbP6VorSW5m9Dy3w/488XaNo1zYrbeH5bh5vNjupLUEBduChQt3x97P4VuTfEbX5LqS4t/DfhryJYCnk+WpMMm3/WbuNwzztwPrXqGnra201vMLKWUK4LYtjtAH4VvzatpkkbGKxcgEghrNgf5dKhwj3KUmfPLeP/GNxDaxvoHhsXCPuuZ8BVuU3DhVDfu8DPPzdaWbWfEU15fSLpXhfbcgi33FmNqQRjd8/wC84z/dr3RrqxuLiMR6e5OMGNrVxn/x2tIxaf8AZpJZbFoX7Kto5A/8do17geEWPxC12y/s5Ljw/wCHLkw8XSqR/pHPVWL/ALv6Yam3Hj7W7i3uYz4e8NGQvutpthCRpk/K6CT5z0+bI+le3rdaPGiFIHkjz82LMn8htps+reH5co1o69MbtPcA/wDjtO3mSeN2fiy7vrq2R/CegeU8e2S1aQ5L4Pzh93TP8O38an87xH/0CfCv/gMf/jtep3VrpdxcRSw2sYXgENZsD/6DTv8Ainf+fP8A8gSf/E0cq7h8j4D1bUJ4L6KyiQGIR75s8k7ugz9K1tF0tJVznyuM7lY5/nXHT6kbrWrmdnCxvJwu7sOAPyrprXUtoAW4jQL2rqRlbQ6620sgqPtjZH0OPzrVt9JZ4TvuWypyG+Xp+VchDqx8o/v48k5LitO18QCPbm4RkxzV6E2Nn+wIW3O07Sn8B/SlXQrZo15OBwOar2OqRt1mTBGR+Z/z+NXYb6OWSMRukh3Y2rk09Balm30ezZ8iIluvzdKnk0FfOSVZ2tfRY1FXbK3uZnJSJmCn+7gCpxb3Ut00CxsWjALHHHPvT0DUx49BhVmMl3cSNnPDkd6nXRbEZk3u7Zx87E4/A1d1CwvLG1luJQVijG4t7fSsD+3oG4F1CnJ+V+DS0Hud98G/D6638R7BjK/k2iPcbFxjIXC59stXsnib4W2tnoOoSRm184kyRItswBlIwoPz9AW4Fcl+zNFDcf2zq21WBKWyMvoPmb/2WvZdclF1daTYjnz7oO/+6gLn9QtY1IqRrHQp6f8ADzT9N8H22g20EKQQRLEVeLevQbjjI5JzyDXO3/w5sR4i0GERWckYk3SL9m2kxRDcFB3HHz7TnHavTLWRF3IDuOef61jLi68YXDOqslnaJGMsBhnO4j64C1EorcauUviR8QbT4c6TaajNE8okuYrVYLSFXd5JC20Dc6gAAE9a5hv2h/MV0j0W9YhtrBEs+voP9J56GuX+PWsM3i7whptv5YjSS71SfzRuCxxRFEOMj+M459eleA2f9o399HaQXMYknkWJViVhkuQOm7HeinTVROTuROo4PlR94eGdWuNasbaeWBY0uLdZ/LdAsibicA4Zh0APB71T1T4e6deXF7eXSWbPJGS++1ydgIYrkMM8jP4Va8PRG13RK26JG8hCqgcRqqD+R/OtDxVKLfwzqG1h5ssfkKe+XIX+tRaLWpq27nO+AdHTwx4ThkeOH7ZdZupHWPALyHIJGe2QKoaN8XdU11bi40vwzql/AlzLapcwwQIkhjdkJAafOCVODiuh8TapbeH/AAvc3UsiJHZW7z8dhGhcD35UfnXzP4V+OXjHwH4e0PTFt9JaVLKOZ99u+4GTLf3+Tgjt3NKMeeXKmKUnBXPp3QfFniDXLiRr7RbrSYYVyst4sOHbcFCjZKxGc9SMcV0PiTQbTxBYNbSiJ4nPIlhEgY8dj06CvMfhT421r4leGzda/DaRRfblit1s0ZNyom5ifmP8W2vWYYUFuiISE+lPlV3FhzaXPO18FaZpXj6zukjs1jtbZ7maQWqqQzHYGyO4RWxx3o16+1PxfrkWi6NPHbTKokkkkAI06A/dcjoZmAOB2G7rjm/rF3HFqWsTFv3SFUYgE/LFGHI6f3nH5Vr+AfD50vQ1nfauoX7fa7mXbk+Yw+79FGFA7YpRt0KdzHns/C3wT8O3V7dToZNvm3V5eS7pJMf8tJZSM8k4wB1wAK5j4e/tGw/EDUvstnomprYx7T/aEunMkGCVHUuWHLd1H0FZP7SWltqVrpK3IefTxeOJfQyLCTCGGcYyXbB4yB3xXmnw/wBQ8VW+owaJ4c1nVLGW+cGSK0nYJj+J25wAATknsPpU+0bvYuMF1PrqbTxrGyRZEguEOFkwN0bY6H8/1p+nPHa3kMMhSTzj5ZVScK45BA6c4NM0GEyK940yNby4RARnKqqruDHnBIJ/Gm6hbRi8t7mJyR58a/L0+9z+lVzaXM7akOtfDzTtQub3UZUty0i/vg1pG2QvOOR04pPh3YvoXgu0jEMa3EyG4kkSEIC8hyTjnu1bHie88jwzqTg7WNvIgb3I2j9TUGvakmg+C5LgN5i21u0hK8ACOMtj/wAdH51MrRTsNNyPLdO/aCv76aT7D4Y1K7g86SJZRNZoJQjlNwDSZwcZ5rs/A/xD1XxXcXxm0C60i2t41ZZrp7eVZWZgu0eWx5Gc18jHwjcata2MUl35F3HZW0krxwBQSyBjj3yTk89a+lf2c/C914b8PXNtcancX0FzfxbIZGykWxSzbRnvxmo5oaJPUtRna7Wh65rmjxeIrURXiQSQAj5Gt0ZSRg8gg9wK5S18GW9r8Q4bu0W2Hk2bSvugVS0jv1BHsn6+1dzIybSE+Zcf/rrI0SP7V4o1diwDIkMCjPTCbj/6FWjUb83UhN7HL/ED4oXng3WrPTrTTZdVlniklItzEixqjIvJfuS/T2NULf4peJ7xkjXwNqXzHaWE9qR6Z/z6V5L8eviBfeGfiM8sS7oYdOhjKfKSZJpZnB5B42xjj6c1F8Nf2gNf8ReO9C0mCGa2+33ccLSKycDd8x4UcY7e1QouceZA6nK7H1NpsMl3d3UMkkTpDIY8kDO3aM8dOp6e1cB8R/g7oA8J69MtlbicReYsv2WPmVsIG4A55r0TQ0EnmXDBQ8kksox/Fl2rO8fSfaNBjtiShuLq2hPPbzVY/otKSUrFrS9jPHhXT9R8FjRZrdVsvLjV08tWyAQMYII6Cuj8F+FtO8C+DNZisY44YJjkqsSxjAQKOFAFQXFultpvlp5kjO6jC9eAe/pUvii//s/4c3bn5G2OSDyelaTit0RFu58rXHwl8NeI/Dd7r2o6Yk97PBd3UlwXcFwpcrwDjgKO1fmARmv1h8W6hc6L8AdalOEFr4cmKsFx8zwH+rV+U625munj9yeKVNWuOWp7L+xT4f8A+Ek/am+HNqU8xIdTF43HTyUaUH80FfVX/BUzUH/svRrfLbZL4ZGeMBHI/pXmH/BNfwf5n7SEN/8A6xbDTbqZXIxglVTP/kQ16T/wUSlj1jxRpEDrmOJpJ2X1woA5+pFOW6Etj879pLbcc+lPEL7ioQ5Xr7V63onw/T7AshgaS8lPmPx3OCB7AZ/Gub8S3kngnxZpVzFaWd1Laj7SLe/tkuIJMsRtkjcFWGF6Ed6rmvsK3c/Uz9mPTz4T/YL8OD7hmsri6Zhj/lpNK+c/Qj8q/IrXllk1jUJ3U/PcSMT9WJ/rX7NR372/7Hnh1p7S006afw9BcS29hAsFvEzQK7Kka8IoLdBX5jQ+EEvLGIyN5zSLuK7cjqef0rOLfM7ly2VjxD7PIXKBCWHUDmvsv/glvoFwn7SGo3zphbDQLp8+jNJEg/QtXkFp4CX+1rHyohsO5CcYOQQcda+zP+CfPhJNJ8deN9T8pk/4lccIbHTdJk/+g1o5aELc+e/+Cizvqnxqh8tfuW7sckn+ID+lfJb27xswIxt619tftM6P/wAJZ8XNUlmw5gCxjHuWNeAXnhGAaxqCNC5+aMAL2ygb+tTF2VgZ7z/wSZ0prz9o7Wb3A2Wnh245PZnmgUfpur3T9vG3GqNqdtIN6lYogMZB3M1YP/BMDwzDpfxE8cXkayBl0qKEl+nzTZ/9krqf2vCL6/vnxjFzap1/2mOKmXxFL4T8stWtltdTuolxtjlZQB2GelVMV6LrHhlLy6t2dGIme5kPPpIB/WsG48KfvgsayAYJOT6Vrcix+zXwTsZIP2IfAUSFVH/CN2znJx9+Pdn9a/EfUf8AkIXXIP71uR0PzGv3b8PWI0L9lLwxZLuAg8N2ceAOf+Pda/F+++H00zSPHaSMSzHhs9TWMGuZmslojzvb3r6v/wCCYdn9q/a68PSEZFvY30v/AJAZf/Zq+e28GtBMscsbqW+7z1/SvrP/AIJh+GvsP7TyXBB/d6HeMQ3Ylol/rWzehktz1r/grUvnaHoLDkR3W7OO+0D+tfmPtOK/UD/gqdB9q0bS4s9ZGYceig1+bkOg+dbxvtYFlVifqM1nTehctzBCnrX7X/sDWv2L9hnwkr4ffFfyYB7NeTkV+N8mhpayRo4ZmkICqK/aX9imMWP7F/ghJIyR/Z85KsPWeX/GnU1iEdz8Y/ihH5fxM8Wr/d1e7H/kZ65ivSPitpNtJ8UPGUhWRFXVbpiV4AHmtz0rz+OOKa9CK+2Jnwpb07VotiHuex/sWIX/AGrPheO41qE/lk1+hv8AwVhj8/4B2jYH7vU7duvP8Y/rXwf+xjoj2X7VXwz3RlT/AGsrYbOcCNznp0r78/4KfWbaj8DWgCM5+2WzfL1/1mKynui47M/HsqTRtrpI/DfnMdsTA9NpPtmhvC7+SxSPLBlB59SBWtzM/XH/AIJgW/2X9mnAABe+kkP4otfm1+23atb/ALUnj5cABruNhjvmCPmv07/4J3wLZ/AFYQAAlywIxj+Ba/O39uzQd37Tni1wpAcW7/KeuYgD/KsU/fNfsHzLsNdp8E28n4y+A5M/d1+wb8riOsdfDsjl/Kjkk2nB7V1/w08NzWPxC8KXHkSYi1iyZpMcKBOmfxrZszP1e/4KWaWdU/ZZ8RFTgwPBN/3zPGT+gP51+LG2v3L/AG7NPOqfsyeNolG5lsXcfUEEfyr8Tl8PZK4kP3sNkew/xrGk9GaT6FXQNLOr6rDagffPOK/Yr9gG0Sx8H6tDt2lxDIff5SK/LH4a+GQfE0DvgFZCNvplQQP1r9Vv2LW+y6RdpyAIIycjryw/pVS1IR+f/wDwUk08Wf7UWquBgXNhbS/oy/8AslfLyRNISFXJxnFfbX/BSTw9b33x4s7tiwaTS1U7R12yPgfr+tfMejeF4vt8OQxDRPkFR2K/41SdkD3Prn/glirrrnjK3YbSRB6Zzh//AK1eF/t2eG5tM/ag8ZOsR8q5aC5XAwMGFAf1U19Hf8E4LJdL+JHiKFDgy2sLjI9GYf1rA/bw8FpdfH65umj3GbT4Pm7fLvH+FQn7xX2T4N2leqkcV2vwQvm034y+BLlGKGPXbE7lOCP36ZrcuPAv2iYiVRFDwu4Grnh3wfBofiLSdRjl3G21K1kZgOAFmU+tacxNj9Ev+Cnmkf2t+zjBeKnmNY3tvMGAHGW2E/8Aj9fkgATnAzX7cfthLpv/AAzPrV1qOi23iWytrZbx9Nu5ZYopwhDgM8Tq4wQG+Vhyor8cfDthF4i1TUJY7UWsZlEiQQs7LErE4QFiSQOB8xJ45NZwfQuUdEzlSp3EbSDX61/8Ez783n7LtzaAktbajdw7fQEhv/Z6/OW88CrBtuFhO+MfNg53LzkGv0M/4JorHp/gPxZpcRZkg1LzQGPZ415/8dpyd0Qtz82vjpoMnhv4yeNdOkXYY9WuWVfRWkLL+hFcXZxrJdwo3KM6g49M19QftkeBQP2hvE8vlfLdFLjj1KL/AIH86+eV0VoNbgRUZI8q3POOatPQT3PvL9mn4U6T4H+LWia3ZpItxsaAHK4ZHXB6CvoD9qX4d/8ACYx6FNI5jaF3YHc3GQPQ+w/KuA+Gixx/8I5f7SuVt5A2exVT/Wvof4sKupafpRVcJ5nXnPIIrOL1sU11PnfTfh3bw+B7jQbpIbiOcOheTcdzEDDEEnoRmq3hP4Grc+H9MvpdQkjaSJZmjM8uAxX5k4b7uc8dPbivV7S3EbIjJvOQ4PoCcfpWn4Xtx/YSxYwY5JYx+Ehx+lXyp2Iuy9bxDTbeFIVV08tQFbJUHHtzn5a5K1+NWmzrtTSdWk9V/sW7Yd+4j6cV2V5M0MceCuVIPzAEcH6V47qn7S1x4X17UdLm8FWyyWZe3Zpbt0ZwD8j48vgEc9+vtUVGo9S4Rctkes+HfGEHiY3UEcFxYva+WZIrq0ntpF3E7SBIq5HynpVHxB4HbX9SJjdDb3CrLKzSsrMw+UqQByvfB7gelc54H+LF18TPEFzdTaRBpkbaeERo7kymUxynIPyjGN/45r02zkDTW/JwAy847jP9KmH7yOpUk4s53wx4JTw7eXJd8iSNWMjSNJyGYADIFVPHfxa0D4dahb2+szR2xuF3xgxTSblB25OyM9yOPeuyvGMc0ZAzu3Jz+Yr57/alsLuaHQL62tVuI4ZXWRi+wBVeKbJwD2jf86txskkTF66naW/7SPgHVr21tLDU7WS4uXWOGMQXIyzYxyYcc5H5123iDQ49X0m4ge3j85CHCHlSyHOMkdOPSvijwULrw/rVo401HNoPLGLjIYxvLbn+H/ZT8h619t2sr3Fx5/3VlVXGG4+ZfSpXxctw5ux5Zd/BKRrp76e7jlGRM0YKfOQQwH+r4AwOmK7zXNQfR9FJjbEKpmRUTD4x0XHckgfTNbsccksSgjK7cHB/Cuc1RVDWWQ4XzlB5znAJ/mBVOCjsF29TF0TweNacahrqiWWNSyWcg/0a3XGeF6E46k81ia74w8BaPrS6Ze6jpFtqT7VjtryWGORlPQhWOQD2zjOK9MvHl1DTZbdZRH5wC5Prnj9a/KTxT4Z8QyeJ9al1W1vI7ttUmjuLlusLozDJ3Z+UggDIx6UXDzP0oh8IWV8rXmi3A0y76mS1AEbf76fdYH1rT0fxFcRPJp1xB9muYeXXnY4PAaM9we4PSvLv2U76+uvhrBLdsYpAoTb5gcLhiMZ98A17DrOmyX8Ch3R5YW3o23PQZwKIS5ldCatoch428CR+JpDJBawpcXK4kmMcWdowCnzKeD/SofBPgJvC+o3UkqxxPKABJtj6A8DKqM9epzXb27IYIlijYKW3DJzjI56+9F2DGqOEJ5xj+tWop6iuzI8S+PNC8FtHHqt9Z6W8yHymubhEL4xnGT7iubT4yeD7llC+JtJfJAXbfxEkk4x96uZ/aRsPtXhvTdQ8hZ/st15bjcNwDrjv7gV4p4FsbWxm1FZdHeYeRM4VmXIZcOMc9flrjqVnBux0xpqUUz6s8TeH7XxLpMsE0Hm8K4jkCupwc49OcV5ze/BmS+u5bs2tqkLv5oijtodyqOQARjkHv1r1TR9SW/sLC9RcrPbxyEZ5OV7/AJ4qyrFtynhQce/WuiKU1cwd46GRaxwaVp5coEjjTJGQu1cZJYk1h/8AC2vB7FkGs6exTjK6hARn0+/XRXciqMNEJExtK/3gOx/CvjnxNYN4T+J0ksVg3kWepCURYUgxEqwHX0LCoqycNmaU4qSPrvR/E2jeKrO4n0y4ju4omCSSwTxzKrEcA7WODyK4vX/hydU1CZLK13CecTPI8akMuMbQWIIIPf3PFaOg/wBn2Xi7XrO109tPS8tYbwKY1VWPI3DafQCu1t7hW8orjbjGce2R/KlD95HUmXuvQ858J/DWDSW1OzvbVInugdyxxhE5GCQAx56H61n3Pw6WbyI4NKVYoEMR3RBssOp/1gJB5OD0J616xeSDdFL0DHaf8/hUU7FZJHDbdwDDJ9ev8q29mnoQpNHxb+0V421T4Ca/pEOj6XYmDVLQySfa43JEsbbCBhuBt2Z6/hXlL/tgeLWj2f2ToZ/3reQ/+z17x+334Z/tfwLpGvxqGk0y+8qQj+GOZcH/AMfRPzr4Rq7WFe59n+Df2pW8WeGYI57TTbTW1yJsW8iwoAwwRgnqCO/eqvxK/ayi0OztY9F0/T7nVFmkgu4Z4nIUKB84bIyCTx9K8M+BehnxNrN1ZrD5rlRuyqkEHOQdx9B29Kx/jT4Tn8G/EC9sJ4zFujjmjXj7rKOeOOoNQkrjvoepwftseI4MY8OaMxHdvMP/ALNXrHw4/aqHiPS3GuWGk2d6xwsdor7SpAOWOTg89PavhqvUfgTbza74m/suJDLcMPOj3YYfLgYIYgY5+tElpdAmfR3jr9pzT/Cfh+dItPsZdeQROlum8QzI5IJVvYDJ4rzWL9tnU4VZV8JaaAfS4k/wriv2jPh/e+B9Y0lriHy4byF2XAA+cEbhwSB94V4/VR2B2ufbXw2/apfxFEzavp+l6dESdiwzuz4Bwc+n15r0z/hYnh7/AJ/oP++3r4S+EVykvi6006eN547w+SirkkNnPA3Ac8+v0r60/wCFfap/0DP/ACWX/wCLrKT5WNWPjHTbUtsYp1AyfeuigsTMDhcA+9U9Kty8Kt5MmAPz5rft7FMAGOVRkEkHpXYYj4dJMLbCeGXp2H4f560q6U0jCPG1s459a1vs6qThWc/X8qsRwtI0ciQtuxkqzYO7p6UxMgj0t422qi+nr0GM/wCfWum8FaKPOeWaTywPTAzyKxxZzeTgxtnvkZrrPDKpZ2qrviV25OVAIpok7ixkgiVY02Fj/FJ0/SrFnJ5kk22e3C79iquRnHWspbvyY9yzowUZ+bao+lT2U0i2qEy20Dfe27ixz36AVdybFfxzcFdH8gSpmZtpAPO0cn+QryW+hCs7vHlF4AyMt+Ndx4pvhPeJGJPP8tc7YgBya5az8KXPiLUIbZUn82d9o81wqjPAA/HFSxxPqn9nXShoXwz00zRbJrzddScckOfl/wDHAtdpHeC48YBUDEWdmCT0w0j/APxK/rT9B0+PS9ItLOPhIYlhXH90AAD8gKqaGxmuNXvI1JSa6MasR2QbR+u6sJSN7HY2sgKg4+Yn+Ln2rnfD17Hdzatd7o99xeSBTnsnyL+Hy/rV681QWOm3NwQAIImkJJ44XP8AMVleHdMbTdJsELRGZog7sv8AePJz+OaiXmNFe48GxaleC/1DTdGu7tYTAtxP5pfyyxJX72ACT0q7Z+CbW3uFmg0TQI3VhIjJE+Qw6Ec9q2PlEaiT94M5IBNaFvMgBJUKOxzwB+dcvLFu5vd2JtNjGnxrExWR1Xc0ig4LHk49OaoeKrpro6VYpnfcXgY/7qAt/PbVhrgybniUgZ/hOc+1YsLtceNbYOhYW1mz/Me7uAD+S11dDHqaGvaG+ux/Zfstld2ckTxXFvfK7CQHbkfKRkcfrVaPwJaQxKI9F8PoqqFC/ZJBgDgAfN6cVtpqAjnZRA2M8c5q0lwXx/yzb681zyim9TVPsUNP0VNKEKrFZ2UUe4pFYxMq7mxljljzwK6dW+4g3MBgHB5rLZtzKMksDk7u9Q61qg03R7+9OQ0UDt+IU4/WtoqysjGW5xGrf2zeeDL+8guBFPqN3LBEqwjOyWbaGzu5ITn8K9E0t5rSxgSZjLIihTIxxuwK4jzWtbfwrp+0TlP37jgD5IwMn8XFdjHqDyAM0CgeofdjP4UlHluyt9CrrlrJqEbiBbeZJMCa3uovNjlHbI45HHNR6T4FMLMWWzs7UjEltp1qIjOPSRySSvsMUXHxA0HR5vIubqKGX+IBs457kcVtWPiiz1ZVa0lSdPvZjfP6Vnyxcuaxd3a1zStbi5VRG1ukccY2osbYwPp+VQR6feS33nNcEWwlEiwbcgY981TbXB5jstlIS3PLf/WrT0/UlljB27CRnB/lVyjclOxT8Xlv7JjhIyZruCL6/OGI/JTSeILCbWLKK2CWphZWSW1u4DJHIrDBBAYduPxqDxNfq+r+H4Mb907zMnsq4B/N62l1C33sdkaYHd+BUyXMtSlpsc5F4WFnFDFDYeHodg2qi6eVAGOg+f0FbWh2txpzgyGyhtkJYRWdsYxvIA3EljngGtBbq2mQsEhZwOG5NPWeBoR91skZZTxURpQi7palSnJqzZbWQAYByOAO2aw/DVx/pGt3CMrSSX8oXv8Adwv/ALLV43W2TJICZyPwrn/A87NoEEjW7IbgtOWPfexbP5EVozNAvg/959tudO0WS9KLG15PYb5HVegLF81Y0/RVW5SWNNJtpo23xywWPzJnuDvro1vgmE2hi38LHtT/ADIXZXEaAeijpWTo0735dTVVJ7XLmnxJa6ekaOZiihA2Oc965zxsS91oELN/rr9WI9AkTnP5kVuzSZtwRwd2dy9cVy+pX8dz420K32rMscVxN8x+7zGoP6mtOpHQ6aaF722iS3kCjdliRXN/Ga6/s34a3Eak7mhdM5xncCB+uK6nzVZVMRCgDkDpXn/x4cyaDp1iWO6a5gjK/wCy0gGf1q5S6EpHn/7Ulqvhf9nLxOkbbS1nbWv/AH1JGD+ma/L3w/arPqVzmM4GwZAzjjk/pX6Q/txax9j+A97aM3z3eqQKnuqh3x/46K/PrwXDBcR3zFyhaYqCB2CjP8/0oiJn29/wTW0OOPxn4u1QR/6nTUiU46b5Rx+UX61z37aV8L7x9PlWcw2+xVHTc7gKPbnFerf8E9dJWz8G+MtUK43zwQbj32qzf+zivD/2jLxtU+JN3GIxte6gVpN+NuH3Y6H+7n8KHuPoczp+m/2dbrNevGsXAO0E/MDjHHXn+VeA6rpN54v8eWVzf6RLZ2ur3Ys4oIZh5iEbUJGc9D83IwefrX0bo9r9nvlmmU6gQeGnI2pyeQOmeetcn8GPD2qeJ/jhoen6hpSwWvh/UpBLI0iuGkuJAUwMcnBBxk8elNaAfoj8frSLwj8EYtPQFVtrGGzwx4ICKnP5V8S2NjFLILd4IoQPlXaONvTOe3/16+1P2wLxf+ECNsHA3SRxsN2AAWHt7GvkC1FpHIm1Zy2QBghl7H8ayjrdlPTcxIPD7rqkMrKFSGVhlRwR6+9fWn7IGmiz0/xpeDCg+RBwMfwux/mK+cZL5pLeVEgfc0hIMuFUY+ma+o/2X7a50/4W+I7y/a3e7mu2y1qrKhwgxwSexHerFdNnzd4y05Nc8deJLrZnF5tBHfCg/wBa8vk8PR3GsauGjzi6VQcdMRJXsUWbnVNakU8tezNuPtgf0riNLt2l1DWXbYU/tGTPzf3do/pSJPpH9gLSWsZPHF2cgFLaJSVx3kP49q5D9qDUPO1K6TGR/aUZLZ7BGOP1r1z9jtCvhPxRcMAN9zHECo6Yizj82rwr9oy6WO4u/M+ZzqMmVz02xUt5F9D5UhtxJFozbMu1tcSkY9ZVxVC80s3EwBQggH7orqY7f7KughgTu0jf931kHNPgt4bq4hQ7tzSqBt4PJx/WrJP1J8cZ0v4BWsC8GHSYVHb7sIGP0r8nVt3S3t7iO2uFk6YOc4xzn8cV+sfxuQQ/B++txgolltznHRMZr80JtLtobf79xIAMFvMBHselc6V22avZHAHwy0UOmpNH5dxGjEhmJPJz1z7/AKV9U/8ABOzRxD8c9UuPLwYtEnG76zRD+leA/YbZt0sPmTOvyq1weACK+p/+Cf8AYRJ8S/EN0qqJF0fYSpyOZk/wrboZdSp/wUqR5YdJj27mklbjPIGMV8PaXp8cmmWbFQpeFDtbgj5RX23/AMFFN8moaMGf94XYhQeFGOmfwr5Hs9KP9i2DS2gdvIQjO18/KPeph8I5bnMXOnLDfWs+P4gMg9vxr9cf2aYQn7JPhBB0/s12HbrK5/rX5VSaDDdlB9kxtPUhQM/ka/WD9m23Fn+y74MgI240gfLxxksf60S2HHc/Krxh4eXWvid4rsZ932OXULjcVByT5j+nb3rhNL0nRLxdL0vbFPcm+kSSOIjzsDy+M9edrDP1r1/4heG438e+I5hdzQ51GY8Ed5GPH+e1cVY/D/S7bXrjUlvJITJ/qjhQVc5LEEg8n6Dv61cdiXueufst+H7iz/aU+H0ssbRhdRUoshJIXZNgbu5x29q+zf8AgoQjD4TxzrNHEVurcHzOn+tH+NfKH7LOhWsPx88D3KXl47R3vEbEbSfLcZPHufzr63/b4tRe/BudWOV8+E4z3Ein0NZS3Ra2PzGa2hW4nQGPAYNuDDgkCmf2bG8Mjx5kIZTtVTz8wrcgtI7FmAtmLSYy2FPYVqRx7rWRY7V1+XliQB1FbGVj9F/2D0a3+DNyjhVP2tvunPG0V8Ufts6Ta3P7QOtzSDBeCBuD/skYr7T/AGIFP/Cp7+E4VvtRU491r48/a/0tLj4zapM24/uUAyCD1as/ts0+yfPVr4fNxDd/YzIHhkSQMv8An3rV8M6fcweIdOuGeZjDqMUu4gjJEi8fSmyaWbOSOVDLGJRhtknpXQ6bpzreWcy3d18sqOy7wRwQeeKpom5+qP7VFqdQ+BPi2DG5XsZf/QDX4+2nhpnUIIypYhtw/wA+1fsd8blGqfB/XFByJ7B+vvGa/Jr+wvM2hHlGDg7W4qKfUqeyLHg3SVtPEVqzrwZl3E89gB/Kv0M/ZLmUtPCF2kW/zc8cSGvg7wxp6x6hHgl1EkfXnB6da+5v2T3aLVrxD0KSD8m4rboZrc+fP2+tEM3xK06Xyw7rbSoM9xuU/wBa+btJ0f8A0+2E20ErIvynudtfXH/BQHR3fxdolwCy7xIAy98heP0r5h0vT5Pt1mzpgb3B59VP+FJaq4Pc9+/YukXSfi9JGowJrHkjrw6/410P7ZWlx3HxOs7lsYezwc98Mf8AGuW/ZvmXS/jDpzj5fNtnT/0E4/Su6/bIsbxtf8P3Vpbx3ErhhIssvl4jJGSDg5Iz0/Wlb3tSr6HyabEw70MAnAuCqrvU5+bA6HNWbrTi8ZX7LHGG5Kp14wQfz/lXUNlY9stvMpW7XohOCXB7deDUuqWMUUjM8cyjHys0ewZwe5qrak3Puj4v6ePHX7L+qWIZ1F5oUkZYLkqxh6j/AD2r8ePCWoWXhTxp5zQX11pEcn2abK7W3HIBI6ZyDgZzwa/Zbw1cf21+z3bHZnztNCgNz/BjPT0zX5PeKNPj0T4h3mkLaXM66lfWc1q8MYKOEc+Zz3wGP5c4qYlS2R6dfW8H2Vmgt1uI3jypVgAeO35V9O/8E+5jb3HiG3TASeG3mIU9SAwOa8P/ALDhzK+nKnlBsPZvHwOf4T2617R+xTd/YvGs9qyyCZ7J1YOoX7smOMfX1pPYRwH7aXhOSH4vLdQAD7RbLncOuN3H6CvljWNAkh1iKTyDs2kbzwOCK+7v2ztPMfirRrpVy2NuT3+cf0NfJ/jW1kW3R5CpUS4AU9M5/wAKI7DktT62+EtuuqfDfwvdh8MlqqE4zyhK4/8AHf1r6A8b3cU3hmwlxgxvGx+nAP8AOvnb9nG9juPhHYRsfmhmlQN7bsj/ANCr2HUp31D4dvJu3OkQbr6GiO7CWxThvEkuTHEckBuvsc5/Wp9CnY/2ikgwFuSV7cEKf8azPt0drIlwsLOudpKDnkZzVrR9SF7dXxVWU4jJDLz90j+lamZuYaeB2Tg5OFb6Vx+reAdH1zULm+v/AArHd3d026WY6gzMeMAcpwAO1dLDdPEWTdnnIycZrYsZAjEyqdh5G3msKtONRe8awk47HD6b4L03w3qH27TvDf2S9MLQCSO+42sQSNu3HVQc+1djpkgXySw/eBhu5/CrV7MjR/IPmPI4Gap7pPJkkAXaBwRgYxz/AEopxUFaI5SctzQ1KVfLU5ztkB/DOP61zvirQbfxBbJbXWnzX1upJCxTCPkqUIOQcgqT+lad5K5hlwf4c/XFTW9zJ9nEi/eZa1muZWIi2nc4I/C/QYrgP/wjU0UshdiyXqA5YhiPxKg/hXV6Yzblt2s5LWOGJUQySq7HHritIzI2Ml95HO5MgH8qo3F4YHaTCqW4JUVzxpqLujSUr6aF6I+WWQj7r8c/59a5XVb3UI7q7iWCF4IpsoTuXrz1xjv+lbkN8JmZgeMg/MMf56VV1Eq32mNuksG7p6DH9BW7V0ZJ2Hw27Sw4kVBkH7vO4dCK8x+IXwa0LxtdTyalptxcSzR+U91ptx5U7r1CyAna2PWu/tLq0gh+ZmPGd2Dnr0FWY2jkfcD93JGR61nKKasy4ya2OY8H+D7Xwbo1no+h6R/Y+kwDcY5nDSyN74JAHWunihuPLLTgJzkBTninTTKHD7syYA2joPeomugSxI3jqAR/KqjFRVkJvW7KFrrFwpMclrGqo205znr1/WtC5cNbSKvPGRz+NJa3gYOsg2FgOOtU2mI4HJJ/+tWkVYhu5g+K9OtPFGhS6dfRXUtrMyFmslBcbSDnkj0x+NcdY/CbQNNne7t014uxLYkCNzgjOM+jGvTLMbofLIzkle2RzSNCiyAGR0fptxxXPUpRm7s2jUlFWRiaDGNNs7TToo7xYYItizXEYXjsCQa3oZB5jqST0Ib8MVC9syzrIsn3eNpzg1LMxUq2ADjoOlawtFcqM5XerKN7KPN24yCAev6CvNPFnw70PxVrM9/ftqqyvsRvItwFXaMD616bLMPtCE+pHHv/APqpxkRZOcc461NWCqK0hwk4vQ5COa3h1CwuHmvpWtbb7IF+wkMyY4yQevH61v2V04hR1ikRCRhZF2nGfSrLMjO2VUv2ZaI5FjUqFyT1yamEVT2Kk3LctTSq1u4HVeR+eahuBuigfduBBB9+4pqyBo1J4yBkVXt7gxxMrNnY2Bke9dHN1MrHn3x08Kjxh8K/EmmND5pa1aSP5cjzE/eL+OVr85L/AMLI6u8EeFXDY6cdx+VfrPfQrcWMsUoDKynK4wCP/wBVfnb4z8NjQfEmp6eAuLe5khC4wdu44OPcYpc1x20OU/Z31dtB+Jy2sjBBIrRHHBLKwI/rXsH7XngldUh0DxBDHvdImtJXHJIB3Jn8Nwrw6z0fUNL8fWOrW0BeGOVGkYMo2n7jd/x/GvsDxvp48XfCObAV5IY0uFI68cH/AMdzR1EfH8/gi2ktxJHCPu71x378+1Hwq1p/B/xe0kOkcSG6Fu5VcfK+AP5qa9A0KxUWaJIMvGTG3HYE1wvjjwbqo8Q2+o6VamRlVWZoyAVdTweT6Y/Kl6gfWH7U/g1PGnwoivRGTc6bOs4b+6pG1v5j8q+P7zwXA1gsqRFWxn5eO1ff+ilPHHw4ktrldwvLPay4zhiv9DXyXJo/2M3FnIu0wSvG2eSMHpQPoeWeG9PfQfEWnagiMrW0yTZ5/hYEj8s19t/8LOsf+fk/ma+dYdFg3J5gC+nHWt/7Av8Az2/SpkriPENJjkmj2LJIDy3B6AV13g/T5L7VF3s0kKn5tx44rn7eUw5EZXdgD5Riu28GRlIZJHLDp90EDnmuyJkzubW1t2jA8tOnTFJNYxNdKRBgqOGAA79Kpwyx/NhpR3HLflT7dvNkaQSzld3Ayf8AGrMzXuFiWFgVUHGO3NXNPs7e1t40WJF4+tYlwyNJErTOnzZO7NXlmNw5RBIIx/Ec0AO1VoZIlDoHBYYXaOtWzqYityTbFP4cnGOnWsqQW9vcJvMxKjPALHmluriEW7z7HVVU8yDGTigZxOuXH23VLiZSY9zYAHXjjiuh+DOntqnxK0mKQySLCWuZFZiQFVeOfdiK5W8vNu9/MVjjIOMYr1f9l/RWvNU1rVnG5YwlvG2fX5m/kv51my47n0/NeLYWM0zfct4mY56DaD/9as/wzC9jo2npNLh/L8yXB4LNyf1NY3i5pJNJFmjMZryaO2ALYyC2WP8A3yprV0+EqjJJIsjKQvX6VzWZqRePNVgt9CaLciS3Usduvry2W47/ACg1xVx8W9QvtSk07wvo0usX0R2SXBVViQjs0jcDHooJ+laXjSGHVvEWiWMhzHDHPduUJBHGxTkdPvN+VeTXPhO1l1C7muL/AFC0tWcQW27U3jikCD52XLDJJPX+dZyu3YuNkrs9TtLv4mSN5039mjcc+QkzMcem7bj9K6az8ZXtpG8esWvkOkZeRsjCqMZYHgMB3zg+1eLr4T8OrGI31nUHfpxrjhfp/rc1vWnw90u61PSdHZ9TktZ/MurpZNSlYsgACo3zEFWLdM84qeVrYvmufQWi3UNzp8E0T+ZHKodSg4IPQj/PeuG8QfErTPB19rep3rMxE62kSqhbcUXG0AAknOeACf1ret7hdJSOBV8i2to8YXgKqLn+Q/SvKtU8Pw33g+zmnN41/qzuVNtdvAy+a+4sNp5wue4q53VrExsbtv4v+JHiS4jltNDttB09s4k1Cb99jsTEg4z2y2fauq03VPGOmKj6iLa+hOCzWbEsB/uN1/76rytfC/g0SMy6peKvTY2tOSCOv/LStTS/CXhWYSTW91ezvbjzWZdXkYAZHUB/w/GsuV9zRSXRHtOi+LrXV7hLdikN0YfPEO7l4843gdcZ4pvjWdZ/D0tpGR5l5NFbru9C4Lf+Oqa4z4U+GdOsdPl1xLeeLUdSDySPdXDzMiMxKIpbooGMAetdPqEf2rxFoducbUaS4+Y5B2rtH6sa2h8OplLfQqPB5njCXe6n7JZog9mdyTx9FFZvj/xBcadpsuyc29jCu65eFf38hJASKP0LHAz6ZrW021XVdS1+/WSMSNctCh3cAIoX+YP51wGlya34x8TWlndz28VidRLRLbxgttgTPmZb/acDGO1TKpsuorW1ZZ0fwX4v15Yby4P9hW7fvIdP0+GIsq56vI4JZvXoPauq07StT0O4AulWO5cb0nVSnmjodwHG4HA465r0CPw/ebXJ1m5bAwD5cPX/AL49a5b4iz6j4dthdR6itzLbw7lF4q4yScKNqjklR+dEpcqMqblKVmzodN1Br23t5jMyrMqtt2+oGf1rSlkSHAXjOSa5jwja6nb6DYPqlxHNOkQMgii29RkDGe2a6pCjoCV5I5qkzZxOM8Ra/b6TrjXF0zutjp/mMsYJPzuT26cIPzFcRbePfHHjGWNtB0ZdE0uT7t5qblGdfURL83XuxHTpW/r2n2b6h4l1a8AeG0kjRcysg/dxj0PqSMVwum+GfBX2OJdVtkXUPLDS+bqUzHc3zep65/Csrtt66FqySuejWMvjzSZFa41LTtUh6tFHviJHoNzNz+VdRpfi6K6uLCO5CWZnmMEaSAKxlAJKYzycAnj3rynSvCvgjV7yGzhsre4kkOERbyQZPp0rp/hz4e0W58ZalqMOmxoNN8qztJlkaSNcLlmUHIDZOCevFJXuVpY9Q8QGPS/D+qXpJAhtpZPUfcbGPxrynVPipeeG7Gx0Pw3ot3rOqCCMbghWOMYADM7DCr+Z9q7z4hyK3hO7tt4DXjw23zdPnlUHj6Zrybxz4d8NR6wU1aKGLS9NWS9u5DdPEiE4VS5B7DdweOaJXbFGyNGwu/ilfTLcXWq6Vaq/JgTzZsc9NwdB+S16H4f1/XLOaGHWILe7kYhBNbvujyegbIyh+uRXhVpqnwTiYE6voP3iQDq2eB7Z6f4V1Go2Pg9vCH27w/FYzRao4sY7m1uiPMDuqsUZcZIGfXpSlGVikz3nSfEljq9iJLJ1b97JCdrZAdThlz6g1zF7e+Z8SD5duzfZtORT5a4G5pGJz+AFamgeHdO0HTrG10yzS2toM/KCcL3OATyT61Vs7wzeMdfeOdFKmCALuAPyxgn9WraO9jOR2CSF44iAE+TJXHevOvjBeG88W+EIFwyG9jLp7Llj/wCg12enXhnvhG7qx3c9iK848Y3KN8ZtEicErBHPN7cIVB/8epy3RPQ8M/bwvpW8E+G7VuHutQmm2n0SLaP/AEZXx34R00jTPMxuV5JGOO3zEY9+BX1H+3trBurzwlZo2fKt7icjtlnUD9Fr508L28lnodqg+Z9u4+5OD/jVxJZ+i/7G9iuj/s/XdwV2i4v5n6ddsaKD+hr5k+Ic0OpfEUyuvmCTUXO0/wCzG+P1r6z+CsK+H/2aNCSX5TLFNcNjjO6RyP0xXyRryx6p4sR9wi2SXEobH+0oH6E1H22U9i3rFymn6RusraOe9l+WKFvu57k+wzk+wrnPgb8StP179ojwP4fstK/tG6n1aBrzU5H2oXRQSUVRyAE4JI6e+al8bahdWei39pYJJPcSWsiiZ22qiMAhYAc5yyjHvWH+xutxN+2rClq/kQ273sUsaAYaOKFwq8jgbkjPHPHvTEtz7h/a6le80q0sLeURzXUqqpC7sHBOT9PrXzNo9nFdeU63TNN9ySNgAyOvDDp6ivf/ANpK5mvdY0JIEEsiSyP5WSPuoc/zNeG+Cr9dXutTlEAtLJbqURO3Lu2PnBGOPmzUUypkAsZVOB95pGGG9Pwr6n+Dl19h+Cd6zL80k0xzjrgBc/pXz/b2cMccbCHax+YN1Fe+eHpBpPwFRw2DJHNIOPVjWstiInz14fzcabLISGaW6uGzjt5jCuF03T5bm61OYovlNf3Tfe9JP/rV3fheMyeGbFiShYySbhxwWY4/lXIeFhc/2XNN5H7h57lzKGBODI3OPyosB9efsrRRaL8M9algGPOvpXPcZEaD+lfNH7RWqC4vpXypJuLpjjviLFfTn7OrrZfBr7RlmSa4uH+YYyN+P6V8kfHi4WXU5VQfIVvpDz07YrOPxFy2OGj01rqTR4y+0R6FAu5eOrE/0qtpOn2SeLNJtw8skjXcKEk8cyKOlXp7l7fU4BE4RodJtU8th15etv4dwnUPH/hsNHG0k2p2yEbfWVap3JR+gP7Rl+mn/DLVXOFVbaQszHgKFJOfwFfmdpvirRfFXmR2FxbyzKpLLBLh8Dpwe3H61+jH7VU//Fo9fTbuWSzljO7pyhH9f0r8w/B/w5t7dftFpGLe6gClm24IYjIBz1GM1lT6mk3sejWPh1H0h5CZFEhyArDOMd/zr6Y/YRtVg8WeJnUcpYRp0H/PT2+lfN1qslst3bSqCu5W+XtuWvpf9h2D7HqfjGYJtX7PAFJPu9aEI4L9vu7W48QaPGGJVpHZufRTXzxY2ir4e0053EQLhtoz90f4V7n+29N9s8TaOx4iEsijPf5GrxqxhP8AYNioO+PyVHy9RwKUVaKG3q2UQsQjOflORn5Otfpt8EWEf7OPhLBx/wASeMj/AL5zX5o2S+T5nlgzBmAPmDkV+lPwuzb/ALPPhhNuzGkQ5X/gIrOpflKg7s/MP4zeKrLQfF+vm6uRAWv5wqbS0j4dgSFHb3JArzi6+LmiahDDaHT7u2gUjM6srN25254/PvXMfG68mvfjB40eeQysms3cak9lWZwAPwFcSK6YpWRk3qffv7Jev2+t/FrwZcafNBe2n27Y0sYw6Hy2IDA8g/Wvrf8AbWRrv4WzQryd6H/x9f8ACvzH/YW1e6039qTwHFbzMkN1emKaMH5XXy3IyPY/55r9Ov2vm874eyJn+NOh/wBrOP0rGa95GkXofn1deHwzIzs6Mf7oHH+cVbs7KKGzlG5WPCnjk8itW+sxDIqu4U4yA5yBzUtro8bW7uH8zjJA6ZyDWmhmfa/7F+Ivh1rEW7aFus7s4xla+Wf2xotvxYeOFdy/ZI2LFsnO5h+NfS37IUhg8Da8q4bbclSp78EV86/tRrN/wnxuBD5kjwjGRyPmqftFdD5/kjTyImnYjk425OeRxV6xutPgvwpv4IZWwVjkuFVj+FUfFUs6aOxSJoplVpBtPXHv6c15rY+EYbxZruQtK6ENJLj7pJ+X1xVEn7U/FBvN+F0zKRtex2kAZGGj6/yr8rbW3vIZ2ZY22M+MFuBzX6na1It98JbMD95FNpsfP/bIGvzhMywXcqfZogofBbHJrOHVFy6Enh+3CoWG0lTFu29M5r64/ZhuWj8VXC5yv7wenUj/ABr5ZtrhWh3JCsa7FJ2jAPNfTH7ON1DH4sIJ2ksy/wDjoOa06ELcyP2+tPe7XQZIs7lnPzDsCpz/ACr5JtbMx31qS7NiYZDcfwtX2p+2dG3/AAj9g7IpEVwEBb3Bwf1r5AXT5F8h3ZipuEwfqdv9aI7ahLc9E+Esn2H4neH5D8qtIULfUHj9K92/agt/NXRLkqGJZk57Ar0/SvD/AATb+X4p0KVeGF6gz7Hj+tfQ/wC0VarNo+lOWwBcKTjnHynilL4kOOzPlm80mdrO+kjnKFcSbVGedq/4VR8QNjS2muFaUxHcFlQgFicD+ddpqKpbx3qdd0SspPHY/wCFc74smV7e182KSW1Z9zMOBuAOBye/9KvUk+yfgZeHUP2f9DB2q62nlt6AjIr85JtS068+KV3p0sM9hq+l390lqL4fI5LMrGMj+91C/rX6Bfsw6kdT+DIDRtEYpZoyjYOMsSP0NfCXxBfTbn41eL9HaBjfWd9JKoHDoSNwdc9gWH6etYXsa8t7HodukiwiNP3LAjMZzxnv1/zg16H+y/M+n/F6HLBIXW4Xb9Qr4/Q15bo+tpdCDfbXST3Cru3YK7ioIb6cN+Z9a9G+D80Np8Q9Kmx5c32hY2Unk7lwf5Vp0M+p6J+2Zb/aNL065YbJIpmzz2Khh/Kvkbxlp/maW7LLHsjl3Ejq3+c19sftZ6at94PFwV3Mr5PHqCv+FfGHibSZZtHeZFXYURtoPoQf61EXoXLc9m/ZnvUk8D3NupYrDddenVB/UGvoLS5FuvBN9b9AokXPfrxXzJ+zHcgWOvQEnKmKRV+pcdPyr6V8JsG0vVFPPzM2PqoNOOjJexnQ3Bu/D1tIACTHE+PUjANSW941rrK4Xb5sGG24xkH6e9ZOiwzf2PP++YiMyIqscYwTjj8KuLcSHVLIyxhVJdN2cg5XI/8AQf1rQg6S1v4n3NK6IEBDu2OOlcnrPxZCzy2Og6VNrV3D9/Ynyp/vHIA+hOfb00PEGgwazYvAXktN7qwmt22urDoQe2DXmkfh69WM/Z/EOr6WMfPFbrAqyyZO6RvkPJwM1jJtvQ2j7p01v8UvGFuzG68Gt5OMn7PIkjflkfzrofCfxG0rxrHLHbSNbXceVmtJUKMhx0IIBrzeTQtekjK2fjTXd3QjEIX/ANF80zQvAuoQ63DdXuv3UxeRCbkwQCRo+6btgbk7efap1jqPc98N5HNDGVZTkfzrK1bxNYeF9GF3qUqxoFxtY47459Owz71b0eKOPTYgpPy5Xf1JwSOa848ceH5jeTTxXsqO0zFEaOORIpAmUkG8fKRyOD3rSV7KyIjvqEnxW167k8zSfCF1dWpPyTTYj3D2DsrfoM1bs/ikv2lYta0q60OV+jXCYjz/ALwJH5muYtdM8TjP/FZalNJtVmUW8W0Z9xF/L86p6poviK+jktJfE95dxuBm3nso2Rl7rzGO1Ze+X7p67a3X2yTeUBUg7WQ9eQaffSHfbSHgHdGcn1A4/Q1w/gfTrrSzme/3LE3lRWsaKiwoQMD5ev412eo/8eQf5mZZAfTvjP61tGTaMmiCwTdbrk/cyAR1JFcZ481eRYowRPLGzeXFawtsaVvUsOijnn6V0Z823muvKLyouWADYB4ziufW4uvFGrWgttIMJiifi6l2AglemAfT9KxrVHBXW5tSipPU5T+0tW8NrFPqehTWemSc/wBoadeNO8XoXQgceuK9Ht5jeQxTQXZuI5FDCWP7sgI+8Klm0zXp7WON9NsjGBtK/bG/+N/5zXMaLDceEbO7srvTZZWt7krFHay7/LjcZGOBkZrmpYiXNaZtUpxteJ1ySSW8gy28YxzSszbg2duONvrVGxvjqNvFI0b2xPVZuq9RzVyRdn3mBOeq816Sd1ocViMMtvLNJJKFjX5ixPArg/EXxw0bSb0WcEN1ql0MgrbAuc+mFBx+OK0vH2j3uoWUZtNQW1AV/MWZC8cgHUEKQc4z0PauB0zwlrukyS/YdY0SztFb90p01txHYsS+STz1rN3uaLY27P8AaC06Pamq6dfaPvbCtdIVH4nGB+deg6f4itNWhSe3uRcQsV+ZWz19q8nuPD/iK+Vwda8PyRYO7dp7c/8AkSl8IeFNT0O6Mceo6ctsdxmjs4JEUMDxsDMQoPfFTzNBues6hJ/ozlfldenPesXXPFVn4btTc6ndLAMZ+YgHH4nitVZjcRFcqSwx+YrxvxJ4a1u71QtJeadcvH+9tlv4JGwucNvwwUleMNgcEiqnLsKKOhX466RJITHp+oTRDpPHbSsh9wQnP4ZrpPD/AMR9D8TLi1l2Tg4aJzhvyPI/EVwSt4wjUKmpeGcYwgNu/wDSSsrUtI13VryB9R1Hw8TGwxJZxyRTAZHRg54z2rN8xeh7la3CSMwBwQx6/pVeSXyb2VGG5JBuHbt/iP1rlPDbana24N7PEzsv3IQSi4OOp9Qc1r3t9G01tMAzfMVIU9OMj+VaR95XMnub8dx5kIZHJwOVzXyN+0J4T+yfECW5RtovYFl3f7Q+Vvx4H519WabJ5iSZGMMR714z+0hoiSWem34DZicoWXsGHf8AFR+dKLd9SnsfPUdrHLIoKoxAwSyjr6/WvefhLexar4T+xSneArQsG54PBFeCSKkcwb5y+ccLXpPwZ1jydSurPcArENgMDgn/APV+takHCx2f2TxBqlhITG8Mp3L9OCfzH61pyW6TKjvAkjD5f3g546Gtf4nWP9k/Eb7QqbYr5AxbsSRz+qn86z5PlmCH5uN3TOenP609BHs3wT1IHRWtW2xvDIVEY6Y7V5f8UPDv9meOtRjVdkV0fOU49a3/AIW6wtrrDQFvmkTeEPDce341o/Ha1RW0jUcYXcYJHHoRkVI0eRyWrBkUt8q8bh/hVzyV9GqO+kVbiIZym3aeOhqLzJP7y/lSA8aW4KtkRRg+mwn+tbdpr11Zw5hKRfOVIVWx/Oq1ppyXDZQ5VfmOeKhto1850UsUckFSO/r/AErrMjbi8WanIyIpjYscDcW9cetdfb/bI4Bi4RSeojbn9a4vw9apcalGGViI+SMf57126gQgFRgHNNEmbf3l7a3CukquccBmLf4VGPFmoxrukmUqOu2PH4deaiuGhm3su8qTzWXMEnkVWMiqDj6e9AGsvizWdxbfCCwBwVOeeg4PtVa88UarcW8kbeQR6lT+XWoBDbqrfvJgp5/1gz6elUmjspG2x3EzSFvu+aKRROurMzBZLSCb68AV9R/AmzFv4Ht7hIlhkvGabagwME4H1+VRXynJbiZktYI2d5CEDFsZJOMdPevt7wjpa6T4d0+zRVVLeFYwvpgY/wAaylsVG4zUp2m8TaXCxz9nikumHv8AcX/2etyC6ZowwZhnkHb17Vy9vG91r2sXShjsdLVW7AKuW/8AHmNb8M22Mr1jjHLDoMDk1l5lmBfXL3F14mu/vxxwrYIqjJ4XLY/F/wBKyfDWl2a+JNKsjGrW2kadkLInAeQjnjvgZ/GtTQhN/YDT/Kst1JJcAt0JduM/hiqXgW4fVtb8QXflMx+1LArjG0hF2gDNSlqhSfund31tYLZtshhaR12AeXzkkD09a57wLpkMmva1q0cRD3EnlK7JjKgnp7dK39U1SRYSZo1QAEr8q5JRTjp7kVfsbcWdrBEg3eXGqg9Og70nqxwVloU/GDCHw3f7f9dJH5Ef+85CZ/Wua8RW8FlqFveunOlabIY3246gjH6D861/FUzz3miWMkYK3F35jKoz8sak9f8AeK1m/EjUHTRpothPnPHAFGMnc4JH/fK0Su1ccS/4N02207QLBZI1ysAd8oOWIyc1B4ssYL7RJLQW+ZLiRYESJfvYyxzx7DmtIzmO3cLE23AQdPrj8hVzw+rz30Uo+6qPL9NxAH6KacuxjTWtzqdJsVs9MgtxGFSNFTAxgAAAVhXFy0fi68mjbKWNiiHcOAWJdv0xXQyT+TDg8MRwcV5/danO+heKL4MB9suZLeJu5XIhWg6Opq+F7JJPCImmGZGjeaQD+Jnyx+vWoPhro6W/jKCKJPJjsdOD7VAGGmkLc8ddoFbCbNL0kRwfKEj2jPUcf44rB8E2d3q3ijxLc2+pT2kEUiWqmDaN2xApJJB7isn8aCXwM9sj80Rj94cs3p7k1518RrBNc1K1tpY2uFN5EMYyPkAJz/30a2P7B1MtEB4i1AcEnayZ6f7tZenl2mgd5GkJZ5Wkl5duvJ/ArTl72hlSVnc3I5nWZzFIqkYHQY78Yq350rbQTs5rBgUySNIVVSpyNp6in6p4gltNKvLhUX9zbyOGPGMKcdvXFaehqcjdW48QeFitzB9ottQv3uCFXPG8spPB44FSeG4rY6hq0qoqsZ5FO0cYRdg/UGtfS420XwrYwTNjZGgbC46AE9/avKfD3xc0m30q/SO3muJ4Tsm8t0yXaRjxzz901nb3hSvy2PYo1ijBdsoIbZpmPQ5wTx+Yq54B0h9H8NxoFjgaV2l24IIDNkZ49KytNvINVW7YPn5YYCiOGKElcg478Guxmke3RnjRnUNyO+P84qktbhG6iY3jJZrq60KAEDzL4SHvlUjYn9SK8L/aa8nQfhD8Q9RmUpc6iYrcsykbixCjHHAxXtWqNLqXjLS4F2qlvbTSMW7FmVQfyB/Ovnb9vTVBZ/DWz0134utSjQtHg/Kqbs8kZ596mS7lpnxFb6dCqWzu0SiPSZppd2fvM0ip26/PH/jX6O/B3wHDN8P/AIR6e9uXfT9Pjv3HITdIC245HXJ9jX58XFrb77y2+z3m+W2s7FeU+XJjbOM9yh47Z5r9Y/Btj9lhjghCqlnbW9mvGCNkfTH41e4bGnq019bSFoZMRRkAoMZHt+Nc58P5BfyatdlQJ7jUJsyyJn7rbRz9AK3r7WPs7TnChMklm+82OeB+FZPw9hfTfCdncBh++U3Do/XLEt1/Gncm2p3umW8SzFlAeRRy4GPyryDXZzqHxelftaWTAnPBJdRj9DXpvh3VpbqS6kkXbGMqh37s9PavHxqLr4+8R3KbT8kMO1ue7Mf5Cp15rD6Hy9+2fqRvPiJZ2jNuNvpcK4X+8zSMf5ivPNJYww21skfyuVXdnp3ra/ag1dtS+OGqGNd6QmCDbnpiJM/rn86y9FtZL7WNPWLKq8gjKkdTyP610RRkfo4u3Q/gf4ctXOyOPS4WcY5+4CR+Zr5NsYvO14Folb90PvDuzk+noK+rfixM+k+A2SMZS2tdgXB7Jtr5Q0ZZIb6XdPu+WIF+44Jxz9axh70my5FLxtpok1S4nQtb7ns7duDsG64QnjPohrF/4J2w/wDCSftH+INeePbt0u+uuvKNJLEB+kjVa+NF7daf4RnlgvMzM5bLgY+SCeTpnrwP0rW/4Jd2PmeJPHt4ygiLT4YFfPIMkhJH/kIflTkrXHE97+N18914wREbhLW4bOcYBXH9a4/4baXb6N4Ztk3LIkge43MMsxY5PXqcmum8dX0bfEmbzBEUjssFZT1y6jj34rCjt2tbdFWRrgtbhhtGAvHQDtRTjpcUndl6+mBsoWhhQrs5OcEDNeqeIZBa/BWzgT5Ilsgx56Z5/rXkN1M1rbQRlW2lVDLjJ5616b8Xbz+zPhBFbqmwtZqCo6qNnf8Az3qpaCieUeGbGO18HaVLJLIpa1jbAB6HBNcJ4NikuPDdh+7O2RSyt53XcSeQfrXeCT7P4NsvmULFYJgkD+GPJ/lXingf4k6C3h/SMakuEjjRshtqybR8pO04OewGeapJks+8PhlBLZfBXSIFUKxjlbGe5dj1+lfGfxsuwBOoHzi2vC/++z4HP0/nX1DofxY8LaZ8I9LivNUktTDZiScNaTDZ1zk7MD/P4/Evxg+Jug63eOtlfCeCaykeOSJH2uGnUZyV/Wso35may2NXVIPsfii/+43l2Vsn7xsYOwn+tdZ8FLW8v/it4O32mYW1S3JkVumHBzXG3/jbRZ/FGsSJL9qhYQosiwvjCx4P8OTXS/Ajxtpa/GTwuGumFrBqHzny5Pl2qW5AU89OPcVq0Zo+0/2rZvM+F+rWyTeVJNbSRhmOFXIPJJ6f/Wr859Z1w6beTPHcH7PcPFAsytmN2CAHacDI4POK+8fjf410L4hfC9dW0W/g1TTbkRkPGwZOcZVh2ODyDz7V8EfG3XLa28OQW0UYN5NcwfZl2rkFWPGB0AUkfjXLG6djeWx6PbqjTXm18r+7Xce529a+m/2N491l4skf5SyW6bh/wM4r5ispYpY7qaIBlLL+7XkghVz/ADr6f/ZDIt/DPiib+JriJAGOOiscCtpLS5nHc8c/bQnLeINAU7VC+ecYz/A3+FeW6ZDF/ZViEdd/kqQo7nAr0D9rqT7V4000M4cAzY284Hlt/wDWri7OKGHRrNsLG3lKA2PbpR0E9yvHG7KzFF4ORt71+hvg2Zo/gP4ewMH+yYOPqgr8/PLhWIt5i7V5JB6cc1+gXg1g3wX0KOQqGj0qEMNw7RjnrWdRe6XT3PxS+Mij/hbXjTb0Os3h/wDIzGuP2n0r1jXvBI8e/tI6/wCHEu/sJvdavVFx5XmbSGkb7u4ZyVx175qXS/gE+qfF7WPAy60UfToPON79jzv4jONm/j/Wddx6e9bJ6IyZpfsTcftUfDk4/wCYif8A0U9fqD+1ZM//AAh7gLvBZeMd81+Zf7I+mnQ/2wPBenh/tBs9Zlg3gbd2xJF3Y7dM4zX6a/tOMW8IXHzqoypByDjkc1nP4kaR2Z8g3EP2gbpbfYwOOmaRIxHbyolsqnYTnGOgzVzdDCvz3KsWJwzHANAuFeGQRoZX2kfKeD+OK0a1IPpr9kW4C+FvEMTHAa63Zz04NeN/tUKsPj+3ZEE0S2+CfXnNeo/souF8PeIemPtAU/N9a8o/aatWbxPE3nbRsYEow6ZHGanl94q+h89eOYVj8L37eWm77NNxuOQMA1zHw/0G11Dwfd3B1B1guo42uSpwYypJUYxz0rqvFirJ4Z1Zt0jbLOZgMjPC5/p+tP8AhzZW1r4DtrC+uES4azjn8raPnVo9yjHc4z+VEtFoKJ+mGn3XnfBnRnU+bG2lW+1gOo8pea/PO8ka31e8QW77UuHG71wfpX3dpPi7SdF/Z30XU9TvIbCwj0WBzJK6oOIlIAyeuO3WvgzxD4p0KLXtQUa1axhbl/lMmGOWPbsammt2Oexqxq0sZAj2J5WSc88f/rr379n+b/isrfnG5iR/37r52bxXottbNv1S3RWhZdxbgHIGDnvmvVPgj8SPDtl46so5dYtYfKCSuzvgBWQ4z6fdNbNaGfU9l/a426h4LjEmFK3EZYn2r47vJmghQA70EkecHp+8619TftKeO/DOqeELnytZs7mFlSZdkmQVyOc9Me9fHmteKtFhsbiZNTtyka5BVx/CwP58ilFaFS30PXPD96seraY4ONl1F09d4Ga+kfjMpuvBdrIAHZZIzyfXivlzQrofZrWdCHV5I5VcDqMqw/z719R/EiT7R8N2K43KiOuc9QBUzXvII3szwb7PHqF6+9MsIdoAPocVzPiC2GpeHWR1kWZArK+3O2ttY5BcRSGRo22yA7TjdyDxV2GOeTTYszJJHtC/N7HHNbSRCPav2VZtvgLVLTdueK5JYlccFFP9a+HPjNbtof7ZHiLarOb5IpADgdYo88/8ANfa/wCzxc+S2vW5kBDGFxt4DfJg8Z9q+Ov2uFk0n9qzTb23gedp9OVvLBA3EecuM+wArltq0b9Edn4TsZbrTtGlaUQCO1wY26Oy71J9zxXe+Gdln4w0ucfMBPEQwPI+cjP61hfDmM6h4RsXmgjhmimuEO98mP8Aetx78GtmG3+x6pBOkgkUHJ5zjDA1pH4TOXxH0N+0NCL74e3bZzsVX/UGvjQRx3Gguo7wlSD1JGf8K+xPizq1vceBbi2LmSR4DlgPlGRkV8ko039mzW8ZijIaRC3G4dSMfnWcFoVLoS/s1agYfFGqWu4ES2wIGcn5XB/rX1J4NkLXV9AW+/Gp/Qivjv4J358P/EBCzMQ8csWHwMnaSO3qK+o/Auuf2hrsjFDFmHj5s5IP096f2g6WLGnNJbzalbHDKtwx56/MM4/nU/lI1vZ3KzFtjpuT+72P86q+c9n4p1NCAFkVHVm+pH9RVa81QR2U67AHjckgHGSHz/Kn1I6HVPcNtO0KwHQN+deO/GCz+yeEfiJdzySGO3tRqMMKMf3Yjwx284GcH869UjmWfaVbHOCDx2rO+IelDX/B2t6bLCohvtMuLZiQPm3RsBUtIqO5+bcfxv1priGJIrNxclAmAxZckAg4br1/LpX3P8LtWOsfDPwBqMtxHGQojkjUkFnB6Y+qk/hX5hWyrHJDJ58alTuwd2Rg+w/zmv0h/Y/1S01j4R2hV0vBZ30kaDHCgnIPIBBGTRKKTVgjJ3PoizmZFmjKbTuz6ZyB/WsHxdatfaTqEKEpM0aOsoYgqw78Vq2+pJcXLp5OzbjBU5zzzSNcQyXiI64EqspDdDg1XSzC9nofEX7Smn6pb/EezGn6zqECX2jpMEtbpo1LjIdsDqRxz71n/sx6vqul/GvRItS1nU9StbmKWHbfXJkQMVypAJ68Gu6/bSj07SdQ8IaxN5ccKm4tN3OAcAqOAff8q8L8E+LbTSvHngvVFubV1/tBURkUhiGIU9h/exWEk+V2B6M/QPw5bBbrVka4NxKtyWIY/d9APXiuk1DzJrGZcAbkbHftVK1MUMsojRd7EPuxycjv+tPlvhI2YQzkcEE4Ga0jo7FyMu1eR70L5qqHiB2t1JGf8RUen28uleKmuRcM0ZkUeS3RQwIOMD1xTTdq1xZkx7ZEZomYfn/SrniJWtNLv7u0RJbyGFpo9zYDsg3BScd8YqKquh0zr5tYW1gczGOLByd8mMVyHiJ1m1yRkK7bq0yrRtn5lJwfrXzzJ+0f4t1eVnfwPFukjViv9pYHTn+CrvgX4s6tr3xC0WDUvDo0q2khlj81L4TBuAcbdox0ri10Zamr2PYbGG6/smF1umdl+/lQC2Dz0rZgulvm8sJ5TMDhm7VlSXEcKkW8TCIniM+vc1LZ72gWVQobnIJ6c16UdEYS3LGtQGOx37shSAw9QQQa87Hh061PJazajcQ+XcMB9lm8shSMqDtxXoNzcvJYyJMm0leGHPvXOXdlb28v2hBseTDyOq4Bxx/LNKe1xxdjntS+G01vpc/la9qjHyiyj7Wx6dsZ5rUghkTUtFnWdVt7iD5owBlm4z710Ia2kh2+ahjzjcc9xXP6BHZ3FnEQI55rK5kiSQcgcmudfEl3L3TOoVvLic43MBj34rlfFUbxwvKkiwmORWLMoPynG4c10IkKMUPAJzx71mahbxTzCKZTJFKhRlz1NdD2IWjOftfAz6hI8qa5qUQZzhEm+UdwAMdKq6T4PfRfEqw3F7c6hbXdswVbpg2yQHORXUac9tazSxyOqbQrKGIHt/hVPxZNZwS2V1HNDiC5GcOASG4I/WuV3jrctO5T8Mw3L6fuuGXzFkZGxx3OB+VbDWckcZwQFHIPpg/4VDbxQwtdCAbQzlznmtBLuOSFhIcKy4PHqK6U3Ehq+pLp7GKVmZtwZf1H/wCuuU+L2m/254L1FB8zrCZE2nupyP5VrW15Gqw5yVjYDPX2qTWGhvNNurZmHzjOxT2//VR1KR8K+Mp77TLFbm1fMUEoaZHOA8ZOMZ7YJFb3wt1y4sfGCO6LHA5Co0codT+GAe/fNXPE9hGZ9S02R/mDPA6vxx2P8vzryXSPEl9oPjLRobi4VrdSiMixgY5K8nHXPettzI+nfjlbsdJ03WIFV2tZdjqz7flJz6c9K4bxNHeNpUt3YTRpcogZFbByuckY7ZHevTvElsPEvw7u4Q4MgiEqlufu4J/TI/GvLdBkhks4zM26TBiY9+Bj+Q/Wl5gyr4R16ax8W6TMoxbyYD+XOpUFx1OVySPrXuHxIibWfh3qMcX725jjE8Ua8ZZeevuM18neN/EWp+Dby2Gnz24QO42tCpbAIK5yP1FfXXgfU4vFXhG0m+Vhc26sCTkYZeR+pFAzw6AR3lnb3Il+aSMOQx745pftC/30pl1ZrpN9PYOxWW1mZOB1XOR+FO+0R+o/74FIR5xDC6t9n5dm+bd2Hb+tPXRZsAi456/d6e/WrNvND5zOGbBOOQelaaNAo5c+v3Cc11mNzMtbuHS7mQyzEM+OMY6VpjxTZyRtGjMzkYUVg6hBFcXskmGkGcL8uOPzq5oNokd4Xa3OAMA9e496ANZYpbpV2nagHGF5qCWz+zybpJ2TAJ+57VrNIoGAuD2HFZ2qQK1uwSNGdiB86jP60AV45rW7+WK4y+CclfoPT3qS3tJJo28m6KqDjcydfoKTR9MMcc0rRRr8u1Rlce/etZYTDGN5jQAcHctAFjwT4VN14qsGe486GCQTSKE/hBz1x64r6Tt/E1nHGCJJl8tc/wCrboOvOK8+8A6Otro8XlwLJcTJ5kjNKyYB9xXWx6bLMjIbRIgylD/pTluRjjPHeuKVRvZaHVGCSJ/DGtW0Ph+01GeZmjuXa4dlVmJLMT0A/CrHiDxxYr4dv5EeSEvEY1keJgAWO0Hp71Rs/BL2Gn29qsCzpbptQy3J3YznsBWB8RNH+w+Fbhfs0cV1NJHHGFnbk7s9e33ay5my+VHc6pqFvo2ixt5gW3hg8wtzjaiZz/KvPfhb8Uoo9Jh+z2N7LDIJLj7YINyPjBJ6jA4NdOdD1nXtASxuY7cQ3EPlO32ht2OCcHb3xj8a0tC0PV9A0/7DZm1itljEe3fu+Xnjlatc0XexlJcysmW7DxQ3iSztJHhCO5VCpBPJ+cj8lH5108uvW1n+7cyB8ZO1GI/lXI2tvq2mtE0iWpt4S7Od7buR2AUdqk8y4kmA+w25MnOHmepcn2LilY1odatdY8bRRRvuktLHcI2BUhncgtz/ALorD8aXbXHiTR7ScpGhuHuGbqNqDaD/AOhVix3Wpp8Vpf7Pt7fEFnHDKHlZVByWPrnrWv4g+Hq+LdRtb3U7eG5uIYjFGguJFRQSSxwB3zS97R2CSWyZpv4rsbxkgtr2Gedy0oijYE7QdoP55rqfD9wLX7Q5jISPZESoJJCqCRj6sa4Cz+Den2UkF1badarNa4MZSWTght3485rsNN025W3eG9gtpmkleRV3nGM5JyR7gVbk+xMIqPU3L7xZZs0vy3AjiQuWaBwOBn0NcXaTfb/Cvhm3gdW+23KTlhn5gNzn9cfnWvrGk21jo+oXctnBFFDbSOzJKSeFPtXBeALrUdH8I6dqV6iXKWiCO3t7eQ7suMknI6gL+tTzPqXy9j2Cb7VawrlY3UOGYnrtGGP6A1kfB+Zf+EXkvJbtY5b64knZWdR9581gah8QJLyG0s10x43v45Y4m84ZYbdpJ4+XgmsLRryFtN26fo7y21ufKAkmwcg8r9zms1U967CdNuNke83msQR28rJfI7rEdg8xeTg4A/GsiwEkaokgRCsaooz37/yrxaHxNp+nyWVymjSHzLjy48yAEOp5ByuAK75vifJImtpDpPlXVjbmZ/NlDKXA+VeAOCSBkU+a7ugp03BO52M8qWcRBeZ3HG1EJ/QDOK5zxbriQeGrlJzMkMpjiZngcYDSKD29M1PZzXeqwRte2lm92sYdhllUZJwBwfSud+LNqum+AdSlW0tVmcxRxFSeWMi+wxVSciuVGx8SNcTQfCOo3UczGG3s5pd2DxiPGf1/Wvzj+H2m3d9b/wBpx3y29zLqiY/0gxPK6jdgcHP+sP5199S6DqHjbwr/AGdq0NvJp1xD5U0KM4Loe24Y/SsTTv2c/CNv9lS18NWEXkEyRsJJvkbjkHdnPA79qa5ot+6Q0noman7L9xeal4BstS1aK5hutS1SaaRLpgZAqA4zgDjJ9K9mvPEllb3T2ypcuy8EpCxHQdOOa4vwn4dvvC9jZ2NqlslhCX8tJC7EKxBbkkknituPR5Z2SZtNsVLAN82c889dtJuXY0il1MWPVIdU+IGorEZUaOzgVUmR4+CzE9RzzXzb+1p40Pgvxh4H+zWNpq0wlnukttUQyxBy4RX2hhnHYHg56V7Z4hkvbP4uQw6QlrAY9OiWcNuAyWc8YxntzTtX+COl+OtWi1rxHYaff3tsiRxSXCuwVQS2AN2OtS+aUdY3QlaLunZnxT4Tkbxt8UNEDWVug1HxJE2xdwGFbcdo3cAbunv3r9LtN1O5UalcTNG0P2mQxiIHccYX19q8y0X9n/w1oerWOoaVpWlWl/ZSi4t5o4DuRz1IOfSu6j0Vo7OGyvYre4eSV5FBB2/xEknHXn9aV5RjblsV8Tu3coeIPEyQ6XqDRW8u9baRt8kTNt+U5IIFaemapax+FtLW23SwzWyKp2MSOO4xVG40CHfzp1l5TrtJXjjGCPu+9SWPhWLSbGzsobSOVbWMiMySmSRBgnhsc81HtJl8sRL7VtVs1mh00+XCTkqtqJOcY6mRfyryyz8Sx+H/AB/qGleIp7aO91GJLy3hGy3LIpZScvJjqDxmvYbHRdNjjQmS4kkx85aeTIPFfDf7Y+vRab+0bZqLdbuKy0SGB7WeT5Zd5kchuQf4wevUCtabcpaszkkkef8Axl1OC6+NniB3uUhT7czBmkThdoI6Ng8Y5zivVP2bvhrd/ErxtBcwNDcaLo00ct9cCQFQxOUQAHljg+2BXy1421Ear4s1G8L+fG0pVMt/CqhV6dgAB+FfeP7AGmpY/B6+vpGc/b9WkbCsQcRxxooJGOPvcV0VJOMLmMFzSPd/ijp/iLxB4bvre0CN+7bKz24UbQPXzc9vSvlHw14k0q+j+1C8tZo5ZMhRMqg4AUHBOe3619beMdUsdK8J6/qStMj2enXU5M0sm0bYXOeTjtX5FM7yWej28cTySMkmRFL8zhnIC47Dj8cmssO3rdmlZLSx9LfGjx5pOlabZt9h07Wl3TGSykum2TI0SxYJidXBHmkjB/h9M177+xn8MNb+EPwyuLu4j8nWNeEd00cIEpjhCs0Qbc4UHDE4X+9z0r8+tF0VfEHirQtJukuLSO4u1tHd3LFVMgGxc8YUHr6mv11tbPTlt5I5TP5ysVJ3yADBwOAcAYx0FTiP7vUuj3fQ8K+JDXvhnxhDqHidra3i1WB4bUzbIizxjewJ3kD5QTVmHxVoTWx261ptvhAAq3cfbv8Ae5rjP25NbtdLuvhzCryC3W7vrt1ExVjtjjUjLEYB3Y+hNeArcRXEtrew28VtFHEWWP7eB5AG1XjQ4PDZfuM56cc74eXuLmMKqSlofYnh97Lxnrn9ladqdnf3EY3ypDMrExggFuG6ZOO1dr8T/DviDxfoMumaekhVoykazRRhPQc+ZmvDv2PLa0fU/EV7HGsEUdvBarDbXPmLCDLlwAOVBMec5Gc9K+ovOs5LiMw+b8rcHdLtHJ68464rhxMpOejtY66Kjy3tufJ/iT4haRZ/DvVrS51Szj1vT7C8sZ7QzIri4hidGULk5OQOlfCmj61Po91DKn72OKQS+RIx8tmAwCQD7/Wve0+w+LPiN4p02+t47+PWvEeoKjvqBg+zF5mwVGe5OTx6etetL+yrp02k2dsNE0SZbduLgaiqytgk4dgfn5Pf0r0OZpJs4up5U/xN8Pw+D5bnW31BrrVbF451hnLyXcxjUqzkOOFMrnLZ+6gxxz4Vb3P7mO6E1w8drEkUhaVVbJcny0G7OzaG6d8k4BxX118Vvg5oHw38Dya++kaZYi0uYUaS2uRPIqs2CAo6j8O1Q/Bn9n/w58UPCcfim7020vWupZI4Vmvvs6qqsQSY+OrbiDQnbUNz5rvvE1jd6hfzW0d1Zxq6yW8UMsZEDBQWKjdySUHTjBbPavdP2Z7XR7jUz4vu2mg0zS9RtzItxOnlyuHjdpJBvBZtjOdox90c/KQfWo/2ZfDGjpFbt4Z0W7VcZd7hXY/8C3c1Pa/sqeF20/UrJtC0e3ivFy0g1RVmX5lb5Sc7eRx6ZxSlK+lgSPMP2FbP/hYWp+PtC1DUru30mW2FzDbRysAkryEFgA6gHAGevQV5R441aK68Z+GNIRVt9Ps7kOrZG0kuByx6kbTn617J+y/4y8H/AAW+J/i+1nludHsNZgjttNa6kDqGRmJDyAAfMenUe/Svm+O1e80+J3sPOFxeSS+Y1yyFf3hBwP4eh9etFtbhfQ+krfVrKS4u/Knt1WSfgCVV/gX39a+3PhToei+D/AGm2c92v228gS7uPtEhJ3uoOANw6A1+Svim3luhdy2lpcQ4lG3y75n4+Xtj9a/Unw78QNMj8L6OJdV095/sVujf6VGGUrEgIIz2xRNKSsyotp3Rwn7WXgPSrjwGfFFjdedcadcqrRxS4jCOrKSQznkEj9a8AtbiGTTbKQkSx7AcK2VJx1r6Z+PXjXTL74TX9rBqVndSyzRKY450du/YHpXxR4X8Q3MNs0EsG5UY7Q0m3A47YNEYpKxMtWet/D3QY/FfjHRtGB8sX16kTFThgucnB+gNfbN42iLbNpcl5GkUUYhRjNIz4xgciUZ4/lXxB8FdaaP4n+HJxDDEsd1uaZrkBYxsYZPFfV994ysMM8N1BJtVYsrKgHBwWPPHANROKkyo3Wx8O/tNfAWBv2oNE0jQtXmhh8UWIvhqFxltkqiVXA+bOMQr1P8AEa8u8P8AwF1jXPjJrXgq01zbf6dbmd9Q2keYoEZIxu/6aDv2r2f9sKyPxE+O3gvTNI1dbWP+yGjS/RyyQYkmYgsvfAx1/irw3Q/hTreofFTVvDkXiZba9tIDI+rM8gSUYT5dwOedw/75qttEyeup7H+wr8O7eP4zeMNQ1GZ5JvC0TwRyCURo8zytHufnJGEc4BHOOa+29Z0HR/GkklncXot4N+FMckjN6d5fmGfWvjL9huT/AIRvxT8SLG8u4nlR7ZDLNIEWYxyyhmBbrnr6819j6R4p0m3uIpDdWkoX5yonjH49aUo3dykz5+8S2trpOuXmnYV5bWeSEO7DOFYjpz1xn+tYz4S3llJCKAWJzgce1L8TNYE3jrXJoLQvE17M6S+ep3ZbriufkupLyEQTW7xxMBl/Mz3HYCtdiD66/Z40WCx+GMN/cTLBPqc0lz5c0z7Qu8hQArjHA/Wuf+PnwvsdY8O6tq+nXzC90+3a4SGGRnjYAgt95yB65x2963PhT4206x8BaBCZ4GZYTGyOUBHJ55PSqnxq8dQan8IfG9nprR+e+jXcKNHIgO9omAK88muez5rml9LHw/4gaOTR7yOXUYAskUobc6gtlSAOKqfCXUrP4haT4U0ucKuo2d5b2MkikK21ZVCMG5z8jMM+3vXh2iaXeMuH0+9nDISAtwIwffGP616h8CL4aT418Ob9Mnit11CHzXaX5E+cAsRjA7dT261tLVEI9Y/4KM6lqnhb4keF/Dlprl1N4Uj0m3nj0zzj5ayxySxszDpuKgc4/CuC+Pnhiw8HeIJtUjuby60XVNRup7OaKJDHDIJXG5Sd2Rs2tgk/eOBgZPs/7Vfh7w78c/i9otvbajLqP9nW8lrdLpG0szPKWXbIwKnbu54wPWm6x+xyl14d06wmsLi7FgAIppNQV5NmSdpO8AA8dAOgx0qYy5UkOWrPkQ+KLNY5Rcm/miulMs0TQxKszZDDnB6E54x9wHvxr6X42j02517Ubi/vLc32jTWenXAhQmcg7Nj/ACtgEZ5ABzjkd/pXWP2QdPmsxBH4RaDjas9vfL5gPr9/B6nqPSuE8bfsz2Pw/wDD9x4judJksbKyXZcG6u45Y9rkIHKkkltzLgL+VXdMgwpPEWneIvhfYHS9fvZp9B0iDdbYIS2uBEzSIdwCsD9mIH3uJSf4Ru+e9Q1a51BfLkkPkCRpFj7KWOSa+nvhV8G9O8e6Lqmrabpr3mny3L2Z+yXQhjcKFJRlDAn73410F1+x7DJa34t/DF6gmA2TfbEzB3+TLYx9c0+a2gzQ+Fl8+seG/DFnBJGby5t7ZI42P3n2KTwMnHX8q+qNUuNY1bQJtKEa4MWwk2kuOB03Y45HXFfnx4KitfA/x18K6bpsV5bf2frMNvcreyxMzzDMZZSO3LcDivvi11S1uDtubu8ilB+bExBB7/w1yV5S51Z2N6VuV3PM9S0+XSdTg0+7Cw3Me4lJSQQpHXGM4OPSoBZ7bWVA26Pc4wvbknqa8r/a+0S1bxrp968cl/HeaYqkbIg0kkcjhNzMNx4Y9DjivDCynSrm5vrK48q7fLrHFCDNjhANucd+w6V2wlzRTZhJcraR+hPwW+0afDq97D5RTesDMGeTDDJxhVPYjv3rxv8Aas+HPiXxR4s0Lxjp+kveQ6WJYbtoAyiOIqx8whkHA+p69O4t/sK3v2vwj4vjkuJkRdbEokAVCytCAmRggcIa+ltUsbXVrG8tZbqaeO4t5YPJZlKsHQryMc9a8+UpKo7HWlHlR8x/C3VYrrwpdx3S5kW6fPlruHKo3UetbM9usMyG3RkEj7VM3C+/Of1r4v0S1bQ5tS0+6F3LO7pEJYoDs8tCUwOhVuEO4Hpxn10tc8QTQ2ErW73qXMZjBZIgsZVHPG3P3iBnd7Hmu6KtGxyPV3P0e8WXF/Po/wBiW1gfdFtcK0jsnHTIjIrwC50CbR9UuhqFlNbStJmPeDskG1clSQM19Pw6gL6yikOotEZYldVIUhQUB4yOeuK+Zf24b3V9C8D+HtW024uZZ476W1klzny43jOPu4xyg5xXFTlJys9jpnGNro4bw7PFZ/FCzhLFP9L2jILfwnsM9s/lX0x4MDR6sTC0beSmS7uUAJxxtI3fpX5z+F/FWuWvjSzvoZtRVuLcSTlwyboyGPDdeWOewANfRX7K/wAQdW1T4jarY3Oo37Wsmh+Zai+ZpGjZJU3FixwWIzz6VvUjJK8WYwtfU+lrjVbp/E0jzQxtaSRmMzIzHBzuHG0dxioLrUoLyPUhC0c4G794rAFflGSR+db/APaF8txGo1XzI8gnCoRjr68Viav4dN+2ofYJLi2+1Md7oEdSpHIwWH51lzSjuXyqRPZ+KLZY7YvcIu6NSSW9QP8AGumkeK4sYHa8hkjc44OSAeD/ADrCj0+OFEQW995agKo81AAMfWob+4uNOW1itNPuLgSE7leRcqwwe5qVUlLRorlitj8qfGelpovjLXNOUFUtL+e3Ax0CSMv9K+w/+CfusLN4U8V6bJLj7LdRXIVj2dccfip/OtPxR+yHo3jDxJqWt3FtqiXOpXMl1KkM8SpGzNkgZ9yTXW/CP4BxfBXVNRvNJjvrqDUIlimhuJYmAKklSpBHTJ61cqnMrJMhR1vc96fULKxmiZikAdWKh2AzjB9arR6tbXzoFkjcbsFlOetZEdq2sahF9otbi3MMDY3bCSSR061q2vh+GNBFtvMMQcsqY7dfl4qfaNO1i/Zp9T56/bm0FJPg4l264FnfwsgC8rvJUt/n1r478HzaZfaLbmUSJfaPcrPDIONyly3Iz6r/ACr9BfjHoEfxb8H6p4UuLa6t4zIkUl3CqEqY5A6kAnvtH514joP7GukaHNcTx6rq7iSIxMssMeNpIJ6H2FXz6apkSj2PrHw/q0V9o+mXy5l+1WUbhsg9v/r1Mb6GFdjzRqysQcH0Ncd4NjuvDfh/TNLls7q6+wweUtwqKN6joSN1WE06G4h894pBJIzOy+ShOd30NYptJaGnKn1Nq7lgHmDaSDKrhh9B/jVqQqy+Ww+RvkbcOCDx/I1zN9Omk6ZNe29vPM0ON0fkqpZd3OOBzyPyq+3iywubKAy+fbTSKrqrxHI7YIHv/Kr5rrUSjrofnD4r+LXjTwj4w13S49VKixvp7ZA9vHkKsjAD7vSt34X/ABb8SXnjLwzf39+stmmqRwSxrAq4DA85Hrk9q9S+LH7Ltn46+IWu+IYvFsOmx6hMZhatYvIYzgA7mDDqeenes3Qf2W4/DtpJ/wAVekjiaO4VnsJEUMhJHc9QfXtTlKDja2voZcr5tEfYrMhySvyEZG3nt9als4o/mEY4zn865yz8TWMenxLNcL5kaDf8jDoDz09qfJ4vs1t826XFyJAVBgjLgYxzx9aSlormnKb1xrFrtwH3HONuPpWcrGSzCg88rz09OR+NZEen2ccURbdllDf6jJ57mi81KDQLTzg000DyBCkcBJDEHHA+lVz36C5Vvc5Gb403emMLe40m1TdIYw3mMM7TjP3e/FaPw38Xf8JJ/bL/AGZLXdIJ1ijYkYPfkDvn8qwPF2hnxTHCY0mt1hneWORIXLFTzgjHr/KpPDOn/wDCJ6iXfzxbzoUYGF8jPP8Adrk9660N3y2Z6l5ybl688c/nVW/bYqyoQzq2evTOa5OW+ttYa1gV5I3iJYiaF1HTHXIqGC3iLBluuf8AZjfjn/erp5uljHlW474leNLfwDoc2uX8DS2sO1X8kAsA3AJ9s/zrxTxZ+1f4V13w7dC2WaK4R4zGjwjJYEHI9sA816d8VbODxh4N1nw1NO6XdzbhY5GiZgGyGVuPp0zXzJF+yfqpPmJr1nIVIYqbaX/Cj3X8Qnpsfaei6h/a9jYXykPFdW6SAjA6gc/rWgWXY0e4ZGVPNed/DvUP+EZ8HaTpOp3HmXlmnleZDE5R17HkcVoXEaalPcXP23ZG0nG4yDt0+8PSpUnZFcqN9WVJbiIAEMMjjI6etPiuIcKTIG3DB46dqwYZrexDGG9V5NuAm9uT+LGsezsYvJhNxeqsxBLJ5jcHJ9GrVSJseWfFbRY7XxddsqLtmAm3nI5xivB/i1Y/Z/sN9FhGjmZNyjrkBlP4YavrXx14Oh8Qac0sN0pureMmJUdj2PXOc18veOrVdU0G8Tfumtx523OSu08/puFaxdzOW5798Jtdh17w1b5cv5kQY/QjkfzriBZCx1zUrMkh0l3KO2Dwf5VR/Zt1h5tHjt2G5oiwy0iL8uTgcnP6V0Hj6wlsfFEeoRgiK4Qq7RkPhgM87SfQ0abC6Hm/xi0cXfho3QVTNbSK+5Rklfukfrn8K9R/Ze8SNqHgm2tmk3PZu8DLnsDuX9CPyrkdct4tc0a6tDLGTNE0YKnnJGAf1/SsT9lXUp7LXtUsmV/LYIxTgbWGQeuOf8KbtYD1D4laWln4uM/zBLqPfn3H/wCuuV2xerV6b8VtLlv7XT7m3gZprdyW2shOwjngNmvOvs6/88Z/+/RqboZxkdvOsa7kxx0qSW6a1hOVyQMBe9c9Z+NrZYzHLcqzYyrcjJ9KonWV1C4aZtRtwVGVUyDj9a6znsaa43lxE2WPFdF4dt5WtWeGGQhm5yDXIR3Ecn3NQgHON2+tKy1S8sSywaiAD/dkH+NAHbx6fdkE/Z2/75NYWs3DG4SNojlR1HFZcmsX14pDX7z5GColyB+R61TZZupbOOOhoA6uzPk2CjZy5J2swFFwZWzPsEkKYzHCQzkZ7DNcntlbaWkPXgMTxXQ+CNBk13XYYnVjFH87bYy2e2OKUnoVFanqNl47v4bWKRNCvPLKKqk3AXIz6AVsWfjzUlbA0W83HqBNjvVX/hE7Xy1C200X+ybZiB+BrUtfD8PktvtpGdeN62hya5Pd6XOi7G/8LK1ibdt0G+3gZCi44x681Wv9Z1nxBJay3vh26a2tpDIYXmBEhIABz2xz+dXP7EtLdsNazebt/itCRjNc3c/ELwXZ3lxpN5fuLq3bZPHHp8xKN6ZVTS5YhzM7OTxxqkcBVPCNxtQfIFnxU1v4z1eNQW8I3TD+99pA/rXBxfEDwGu5V1e4HGNr6ZcHb/45Tv8AhZPgFWR21i6ZiOn9lz/N7fcp8sR80j0K+8da59lAj8I3DM/ysDcqay4/HGtqGmufCtwrL93/AEjJPb1/zin+HrvTfF2kpeaPBcXlmXKCZrKRQSOuAwFaOqW1h4b0y51LVFlsrC1RpZZmsmIjX145pcsVoLmk2ZWi65qen6pfapN4XuLiW7l3lmlRCo7DrW9ceP8AxD5yCHwZMR3YXacfrXC2/wAVPh/eQmRNXuJAxBDjSrggj/vinN8QvAR+9qV5nodukXB6n/cpcsew+aXRndn4la7asit4SmTcO92pI/I1a/4WFrc4USeFJI25CEXA3be/O76V53Z/EX4emZIF1a/81nVFT+yJ/vE4A5T1r0z+xYo1ZY7OdWXv9lAz9eafLHew+aXVmNrPinVtX0q807+wpkiuk2O63KMduQSMFu/SrFj4m1CHS4raPwWjQQ42lrqJcsAQCRu9Ky/Ffibwt4LvrC312ebTp77d9mjWxZt+0gN93PGSOtZGpfFjwLo8sSXWpXMbTA7Il05mZvfCgmlyxelgu+52/wDwmGpNDCJvCEIMBIjxdINuR14as248danbyMieELZk3bvlvVHpz97rXPx/GbwJDGqxvqc+eW3aLcDH/jlU7z4t+AL5uZtVh4xhdEmIPOc/cpKEOqHzS7nWQeNtQWFXk8D27rG/mDddKwBJ68t1rYs/H2o3KSzx+BrRHlwJi1yvzAHIHLeoBrzyx+Jnw68w4n1bLjarSaNMF59crgV1kPjzwV/aOmaQ93c/2hfSeXbW8dgWaQngZ25wPc03CHYSlLubNx8StfjmEsnhu2Q9CEvUHA6D73ufzqtrfinVvFlnBbT6EkNvDOlwy/bI3DlQflOW9SD+Fb9x4Ojjt3C6Zcs5IyTbp19c7q5LxV8QPCngPWIdK1qO/tdQmhE6Qw6c0xKEkZ+TcOopWi9kF5dToIfH+t2ixwxeF7UlBwPtcYB/8eqw3xF8RiEBvDNgrnqn2xBj/wAfrgT8a/BCn95/bS9xu0GfoO/SpF+M3gC8mCJHrLtkE7dBnJ/9Bp8kew+Z9z0i3+JXiIQg/wDCLWLr0ZlvEOB3/jpF+J3iFX2x+GbYgjcMXqHj/vvjpWF4J1nQ/FU10+iWOrSyWyqZEn05rdRuzj7+M9K7AafOEKDR58yDtFHxx/vUuSHYFORy8OtajN4hudbk0OM3lyI4yslzEBGAoAUfN7Z/GteTxv4jhZYh4eseSNxa9jxj/vuvOLP4/eB728eGBtYmVHMbeTpEknzLnIyBjqPWtC1+NngkSNItp4ilLDaS2gzDv/u0eyh2D2kujO6Xxv4habcuh2BcHOPtyAY/76qW78c+JWmig/sbT41blGjvVP1538V57N8WvBDzO8un+IELfMNuiTHj16V6DpFrp+saXa6nZ2WofZ7mISwia3VHKkd1LZFT7OFw9pLuTnxlrpceVpVi46Mx1EcHGOPmrG1vxT4lvFSV2OhrCTuewuFn3g4ABXd+tb3/AAjsUzgJp9yqgZOI0/8Aiqra1N/Zca2wtbeFJFxu1LEYf6FWzR7OF9EPnlY5631rXpmXyPFGpSSNyFa2QADjP/LT3H+RWBqXgGHxDeSahrEs1/qjED7TcafbyuQv3fmLZwBXX2NzPNIfIGiDnaWErHGTnu3rXQWaTahHJFHNpMrj+GLdnrjselOcUugot7XPKpPhnotxMRdaVE7Fid39k2xYtgZb73U8flWloel694Z8+x0q9nstCWUtFHa28SFQep2K4Gc12slqbO+EV5f6dp9wNpPnF1HzZ+UEsMn5GrYeQLAGS+0OYhQc5YbiOv8AHSjGMtkJ3XU8o1C+utes5bWTxTrUltK2yaFreMh4+QyHL9xxXPw/D3RtJ8uexlvozGvl4XTrYFVLZCj5+Rk9K9cnuLSxjMi2vhlCw3FuQfqfnqaR5JLWKaOw0eRZRv8ANjgkb5Qeo+cCnKKjry2ErvqeS3fhXSluUktrm/ivCynz/wCzrfeuD1H7zqOa66GXUfNiWPxd4lYyjGDBFljzwR5noK7Sz+wTozSXHh63l2q7RTwMkikjPIMvXB/Wkum0+GaBYL3QS8mVDRhsr+UlVGKf2R3t1PONb8FzeIr1Z9Q1DWb6aGJlia4igPlqwAYDL9DxmqVv4PsFjaD+0ta+SMJtiht1Tbz8vDjIyTx9a9B1DVp/tsdjaxaFeP8Ad+QsXz9A5z69e1MkFxp7CW607SraIkhyIZAqBVLFm+fgAA/iRU/C7WDfW5w2jaCujtJb2eveINPjC7RB5dv0HTAD9vb1qxFqEssdzA3ifxKq4ZcrHAWUjIzy9d7DdWt+GBfQJBkHcyMwBxnjMlZ99cWFrc3CofDyltwYpA4JOT3ElQ4rrEtSfc8r0zwDDDqWnzx6hrP2eKbzXY2lvwxO5uFYsd2MnGTmvbNLhs7Owia2Fy428y/ZJR06nG2sPw5dfadWsohNphtySXksw4YAKeclz3xzj+desW8yafaxwRyqIePmkOQSTj2zzVU03FiqNaWPHPjetpd/A/xu7reHbpcxXfbSKNwXg8gcZxz2rqvBei6R4b8EaDpkZuEFpYQR/PaSDpGo6YOOnr61jfta+KF0H9nvxY6jzmubdLIBDgL5sqJn6YJ6V6Vpskmp2kEwRo5EUFkV84yoIB564KmtuXTcyuYP9oae0rQhpYlXHzfZpTk+w2Vz3iKzs760nkETR7Y5Myz2MpHIIycgcCvVraFZrWDI2uynKvw3HX+n51R8QT22n6DqIa7jHl28rK3mAtkISAM/4U+XsDlZH5bfEa1+2eIrOCEb7S3t/MiVeVyxwdpA6fKODU1vefZV2NaSyuRw0rs3JH+57dKoeLdJk1TxhqF0hEUfCDyivzEDnqw9K1/D+gzSLDJHLbuW5bcTuTHY4atTM2NJuemIliVwQSI2ZhkH/Z6V1+j/AGZVhMsSXW5s7BEVbB9WKfSuZ03S7h5Nk2JApPzxNxn8WrpbOxuWkSGZ1VflC+btA6+u6tOgGlJ9ga4kkOmsIsKuCofHGeoT+naobqfS5Ps8cVgmRIG/49mB6Hg/JyKlbRW3GMQxSqTwylcEgY676da6Wbh/JjtFZifu/KQPx31LA6HRdT09Y5gNPtn8tTuZLfy/zylbEOsaV9o8lvItPlIGbR5A3GOyc1yr6NMsKCeEjKHDSRoB1xgHdTLeykjV/wBxEoHXhcnk/wC171NkO50gbR9RhP2ySFE81mVVsJFwSfVU6e1WLTw14dvLfd5bZB/it5AGyeDynauPuNDk/dqsCxRNyD8p5+hat3StHt4NNnPlwRFsYkkdcnHphv0p6BdmjfeD9KaS2jSdJI/MHyrZkDIB6/J7n86ry+ANMtYZpHjF6pDANDEYzESepDJyOe1XNH0WGHEwaEHeCm14j14zyfeums9LtDfI14w6ZO9IDH+e6loB5vf6RZ6TcKyaXMqMFOZg5yR/EMKMZ9Kzm0uK4uHMcW2RpOIiJRkH/gIHH1r0fUtL0q6lkktpVXB6YhA3DvtLn+dUG0e2uo5jKtw54yNkJU/rwKYHO2vhe3sWC3uny3aNnascjrtx24z+VMSTw7ZLIZ9Iki2HIikkmbJHYYXHTNdLbaLZ29qWe1tSfVvKz/Op7W1tPsMtu8ANvIuCqRxfNnryTR5C6nHTal4ZuJGjh0eaaaTkbfOHJA4HAxish4dEuLeS2aB7QyHa8Mj3ALc/7PH613GoeDbW6/f26b3wAS6RZxjjoa46+8KpGkkJtN2GxnbGuM/Ws3Ys6T4J6Voum+KtYgZmisFto52Xe6hmBIKs7dEHB2jrxn1r6egvNAmheWKTTpyygeWHjYLjoOmR0/WvkP4b2Mdv8TLS3aJntvLePbKqhA2zIYgcdsZz3r7m0XQbJrcMmopISiFtro2Bj2P1/Kptpe4N6nF3esaJDBLJt09PLwSFCZ5OMdKwvEVr4Z8U+G9UsrqGz+zXtq8DB1Uk5BAIA54ODwR0r0nWvDsVrZyyxN9p2jzQM53HPoPxrkP7U1FY2U6fNIT0+VhgdePwpqPNrcXMeSfs1x+HtP8AgT4VMkumLdTxSSSecMOW8xwc7sk4xjPTjgCu9u7rwxc2LLLf6VbiNwRIu3k9OcDpzXOfsi3g8TfBbS7iMLbiA3FqsjctgTykYB9mWvWbrw7awae0RkjVW5aVyOSCeTnjP+NDh1uHN5Hw94p+H9nD481e7tdYt1xqJure4t9L37G3bkKuDztyPriu507XPEeY45/iDcSDIQCTRZSDwOvP1qf4rWrWPj7UoIksXiYRlJJLhkzlFyQoUjGfSsNLPUZIwDcaeVbA2peMD+qVHLzPVD5rLRl/xVpE3iD/AEnWfE1vqUSweXB9o0SZioycgHBxmsaT4c2d9pUUM+qaXDAwyI20KTb04xheDXWWaapHYvDKmnzoxwqvekEDHb5K1NBtHOVeygkRcjH2pwv/AKLqZJx3KUrmT8P9KuvhubseHPFWn2MV3tkuIbfR5wsjKMKT8vUA449TXXr458YMysnjOyAzjeuly/Lwe2yremeHI2l3LoVpIxAIMWquv/slbK+GEv45MaVa28qY66kzZ/8AIdNJb2Dmltc8Mk+F9hcagL0Xmhy3Bcs7f2NMMsT98gL19+v51buPgHpGows9zqmgfvMlv+JTPHuPrwvXrz15r2dfCYt4C4gs4Uj5kRdQb+Xl1WukfTZDt0aSReSrfbxj8MoOOn51PN0BRM/Rdc8X2entbHxHpM0FuirCz2cxO0DAX/V9hgVjePrG8+JGkxaPr+qaPdad5yzsrW8yDcoODlY89yPxrso9ctlsws3h26LMvJ+3oMn24p99Z2zWsbS+H76F25CJfIW9u1Pkdr2HzdLniEPwD8JWqRj7T4flljII8wXJzgEDOU56/oK2vC/w70z4f642taBqfh+01BongMzSTtlG5IIZDnoPyFemNo8c0kay6beK/JC/aYmIx1yQPcfnUjeF7SSNXOmahKhOPlu4v5Gsr301Ksc5N4q8SKQE8Q+HehP8QAHv8lV7H4x6t4f1VotZVtXE0SSQyaNETCq88ElRzxXYr4KtGhO3RLs7/mYtPDkYPXPauK8TaTZ6HqFopiutMEsRO26uCS+D1GwkY5q9LWsTqtbnRj43WtxIAdM1iM4yv+j5Gfyq0PjBprSQ+Zbaq0ysWJSD/ZxjFcjYvpzFQdU2t1H+kyjGK2PtWk2vmTT6pb2sUaBmuJruREAz1JPSo5Yj5mbafGbTmZ/LsdcCg4yLXj61LD8Z9Kucq9trBUHDbrU5/kKwLbxp4VhU7PF+lybhghdYH/xXFWrXx34XjLRr4r0ph2xrK/8AxVPlXdlcz7I2pPjV4ft7iF0s9UzHkMr2/QYPT3rUb426SZIyYdRCN0LW49O9c1Z6/wCHbqRgnivS338KjaupbJ9Pm5rbe1soRu+2Ej/r8J/maOWIuaXYp3HxW8O2t7d3QjvSly4Yr5I9Mf0qG6+N2gw2+FW7Abg5gBz+VPvLzS7NEE+swWw5Kia/VNw/Fh3qnJq+nKyMuvWUsbddurR5Ht96qSXcV32Li/Grw5GiqZ7pP9636+lMh+L3h7ayJPdIDk5aDrnHv7Uf2ppE3C63C5HT/iZR/wDxdOFxp1wAF1NJCP7l8jEfqaTiu4+Z9iOf4p6DJpd1btfSbmiYL+5wc44PWspfH/hfZbO+pzQXFumw7ogQ/Ocfr+lbkNnbFjIupAovXddpTLjTYpJPn1FCFJ4+1R5B9MZ+lLli9xqUuhy998QPDNxJcYvyYmbkGE5J65NRXnxK8P3UPkTamyRyYVcWueg478V0t5osNwWBvUI/6+IuOKpfZEdQpu0YjuHiIFLkgHNM5+3+IPh17yWabVfmkjMZAhPzCr/h3x94UsbNUj1rOZS43WzL14Ixj6flVuXw3bXUwYSZA/uyRfrxSw+F7eCbcJWT0VfJI/lT5IdA5pdjRh+Knh63VY11KMPyfmjbnHf9ag1D4laBeWbp/acIkJUxny2OCCKZdaK+A2RgcbmSLP8AKqP9nKJNrFCM8Zji/wAKfKu4rvsOufit4dtGMP8Aa0Kn+IeUw/p71Db/ABf8M3MjQHVondRnaYn6fXFLL4dZmLNBuPUnyIiMflVOPw1H5h3QhierC0h/L7tV03J17GqfiJ4a4Y6zbAnB2rGwJx+FMX4kaUq5i1C1eHPcMD+VUpfCkbSB/s7emfssWP8A0Gqd14WRJMeSuMchrSI/+y1PKr7lcz7GhN480OS9jlOqWqM0fznacAg//Xpz/ErRtvlf2tasDwfkbpWfB4XR/kW0gZm9bKPP8qa/gtHU5somOef9CTj9KpK3UV32NK3+IGgTQ5TVLRV6fxDGKik8aaFb75RqlvtIz8pJGfyrCj8CwxyMDpsC5PH+gp/hVh/A8TQlTpdu5x1+wr/hSaXcV32NIeNNFbDyanahQQSysT/StRvFWkSKGjvbbOMBiTz+lci3w7sWYA2UC7R0FmoFNk8CoqgLaxIBwD9mFVZdxa9jon16yuI5Ab62I5XPmAdq+ffFVnNY+Ir9IodOa3lZmgMkZfcGjLAHHuCPxr1C88BvtK/2fb4Jzu+y4z+Oa8k8ReFda0HWJ4rOOSCPzGkURQgjO7IPLdOnH+NNWXUTu+hZ+Gl0mk+PNOVLbTbKyuHuLT/QFwSxVHjLA9ipX8a+hFs2SMI91HKp4b93jPHQjNfM62vi+JYEjjm2rIkiN5SDDLnac7uvJ/CukttU8b3DyPKkyzRnerCJDnn/AHql2vcdjW1jSRpuq6nbxW2nhIZH8tZsglTGZIx177XH4ViTMNDle6sbDRYBuaUzQMQ7FZEYnGepR934Grcc3i7ULrz5JLguAAWa3Qk7Tx0bt/8AWqW+sfEcdvEFuZpEA+4bRcdCvrzwcfl6VV1YVnc9ktVury1jnSZYkcAgxruzkA+tH2e8/wCgnL/34P8A8VXkei6p4vt/IhkvLiK3X5VLWoIA9ODW3/aHiT/oKf8Akv8A/XqdB2Pj6bCW8hz8ygkc1meV/oqDbmSV8j1wOP5n9Kt6gNluMdzg0y3UNqFsh5VVBA/DP867DE3obUwxovkqQoxnj86S7WG2t5JWRdwXgD17frUjHKl8c5/DpWZrihbRCBgs4z+RpiJNDsg1mJGjLFmLfexwOP8AGrkluFy3l4TGT85pNPjVbGDAx+7U/nzUerfLZSkcfLj8yBQM7/4H6WlxZ6nqNwgk82YRosgyBtGTjP8AvD8q9XsRFp12kkDCzdmVTJF8p9e30rg/hUot/A+nbBjeZHb3PmEfyArtrFy15Fn3Nccm+Y2Wx6jZ3thJZgy6kXk4zunOa1Vj0wyA/wBqMkZXdn7Qw59K5fSWKIMc/Un0rpElMiruVTz6VF2VoQ3kOnrulbU5fLRCzt5zHAAyf0rzvwD4ct7HTp9dmikvp7id3ZsBmfOTkn2ArtfFd/MvhrUtpxuhdT9CMVz+m6hLY+BbpodqNHavtYDHYj+VdFPZsxlo1Yu2s+gXdrPNN9ngYjP72RAe2Dwfejw5b2mpeXMpaaFXQCQJGSUJCqW9Cefwr5u8H6Xa6haQSXcZuXyxzK7H+tfQfwX023tfD4ESbBJeq78k7tsZKjnsDVKV3axPU9dtbXS9PtUghvGto1G7y0mKgZ57fhXH/F6bTdQ8MHTo9TZ2v7iOBsTsdyZywI9MCuwh1CRVU7V6eh+nrXGfE0i61DQYpEUp5jv07/KP6msF700jWWiLWn6Xofh3S4IEt0SMIP3jFQpYjhQWxnik1i/0O3ht3gns/OkcCOMyxkyHkfMM8Acn8BXk37SWoXA8IafbRytAjXpBaJirYCjAzXhoslWAyiWcSM4XeJmBAwOAc1u5Xb0MVa2p926Doek6xI8klmLdfLWQOpBzzjcCM+lddbaXpMfBvZtp6fvZOM/jXKeGW/s+zaCEYjjht4lBJ+6I8j+ZrVa/mjwVbH4n/GpmaROA8YeHtL8QfFb5JWuo9NsQAGcuI3YlicHOTjbUfhfwtH4q8bXusXkPnx2UC20ZktxGr4BP3T0zkVY0fVph4w8RzbYzJJNtYlc8BFA/lW94V1KUWGqSIqRs+oYbYMZAKgfpVRVvuJb6k9veaAt+LWd9Mg2vslxOBsIB45xWd4guvC114mtBZahpsksEbeeDcjyfL444ON2ec+xHeviv4gXk+qfGjWlnmkMbTsTGrlV+4G6D3qpa6NBHZrtknUtIpO2Vh1zxx25qFLS4Ox97Q+FbO4bixt3Se3M8ckPzoq5GCeO/P5Vk+CvDUHiT4kz63elidPjW3gk8gxE4y3ygc9159q3tPvHtZpo0A8u2sbeGNSTgLg+9SeA9WlmbU5DHCGa6I+VMYwoAx+AqpdEUdusVhFMCzzk45VmmP514/eaLZ+IPjBreoQ7ri0tEjgMjMSE2qCw+bp8zGvX4tQkkYgheBnvXmPhu4ebxF4gcnAm1GQOo+6f3mOn4VNFe9qFR6HVD/hE2uzFef2dC8QI/0ieMjcOqnOKz9D/sHULydbKeyvbWN2YeW67mIyzBSByoHH4V8p+ILG38QfEjxVcX0fnu16VwzNgDAPAzXpvwV0Oy0vXtaltoFikFk8IIJ4UkZA9PwpRqczStuT7vQ+iNJ0+y2vKySxiZVKx5cEDGeqYz1pviK60vTfD+pzm7ubZobWVg/mTDa2w45PvitDTdSksoxbxInlKMAMCen41h/EvVpm8A66cJzbFT8vYkUpS96xpFaHBfCXwXp2h+HILi7tsIqiR5JpAAR6sTz1IruL7UvBtrocrSazYWU6lv3UVym4kHIVQeTnHp3rz74kalPbfB3XY42wq6S4/Nhn+VfNHh/wAJ6W+m28r2wd1j4ZmJ7Zq6k+WVrGStbU+4tHjt9QtLJ1t4byZpNjSWzAkMASMgDsOOveurXT9LtYljImMgTaT+9649uBXlvwBtotF8E6BbWiCOGP7RKF6/MW6n8zXpOpa9cRhiqxg7fQ/41E5e6mbRim2U4zp6SmJY5PNx/wBNt3+FVJltY5Aw0m5vtuQJFztU+n7xh+lTtr1wrBQkW0qMrtPP61yev+ONT024jggMKxSLkho8457ZrKMtdR8uh1sNncyQyCLSbiOThjtMeeo968A+I37YWg/CvxI+l6fpZ8TSxblvXjuBD9nkzgIG2neeueBjHeuk8UfG7xLovh/WZrZ7USQ2jlS0Pfp6+9fCniG3jvPDE2qzgy39xKZJJWJJLFhk/jmuhpXIPqz4a/teeGviP8SyniTSX0eBomOnI8puBJcEKqxnCjBIGFOMZJ6Zr6Xa9dZFS28P3LFyCrSmJdufUb6/JDQdQm0fWrG/tm2XNrcRzxN6OrhlP5iv1Q/4S7U7bS450mXfJHG5yoIBbqB7cn86JJJXSGrs2vEHiLSfC/hm41XxZDBZaTCCZZ5DGQgzgKMHJJPA9zXyNfft4WVqs+n2fhCS9sYZJIraeW+8ppIS3BKeWdpx2yceta37ZnjjWJ/BumaW9yDZ3M8kssewDcY+FH0+Y/pXxZtG0GlDXcGrH6R/AX436F8VvDsskVlu10ySy6haSFf3BYnawkbGUI2gfQ8cV6Hvn8sgWZghU7VeGdSDyO+4V8Z/s6l/A/xcstP0uR1tdX0KOe6SXDZYsDkemO31NfV+sanehPM+1N8oGF2rt6dcYqVNSSlFbjlFp2Zz/wAcP2iPDPwh0iECy8/xKCkltpokGZYySC7yDIUcHnrnivEL79vCDxJqVlFfeDl06xaVVupo74zMIi6lsL5a54UcZ5rwj9oLxVqHi34qazc6jKJJLdxaxBRgLGo4AH4n8686VetaRStsTdn6p6D4kn8SaJFrOkQ3F9pdyC0E0LLGJVH8QQkYHH8qfJ4ourdXlutMnVVVmYtNGPlIJwRnmvBf2YvHGsXHwisrRrkeTaSS28WUBIQMWAyc9M4+ldN8Utd1HS/hv4o1OG8druGzPls6qQu4YOBj3qJW2BM+eP2nvjbZeNfFWlxeFLyeO10kSsL63dovMkk25C45woQYOf4j+Pffs8+K/FGveBhdanq+oXkQ1aO1ikkBlYIJbcsCxPI+Y9c9aTwD+zH4L13wX4d1a8XUJLnULBJpVFztUO2MkADj8+9en+E/hvo/gbSbbSdN+1fZI7/7Uvm3DE7/AJT2xx8o/Kri9OVE31ueTfGqHxX8VtQbwpoiXEGkWJjkubnVpfIiupw2xQhJIIG8n8Cewz7b+zjdzePPB99Y69qV1YeJdJlMF3brHiORBEqxujg4bIiyT611EPw40N9jGCbdIAxPnvkE8nHPHJqLwL4L07wvr2ty2RuN15taQSXDkDAwAMEcYpXexEZM8V/bSuNU+Hun+GbjR9f1C3nk1G4dZI3aJxtRMcg9PnIxX0Vp9wJvgjY6jql8o1iTQFmmaQ7jNI1uCzduSf515v8AtA/CvQ/iN4Hn1rVhdfbdIgkNqYJyqqWdAxIOc52itvxJfS6j8M4o5NqJFoixIIxjAEQAP1xVxk1oW0fKGl+G7u4k+1eTuM5MhY5+Ukk9fxrvdI+H93c2cW2TYrDJXD8/qea6zS/Cdi+nLIQ+9ejfL6fSum0ezT9yOMOBkbF+npSbBHHWvg0Wa7DC0gBXDBGz/Oumt9Hs7jIlZoSnJVpSuMDpXSaloNtYrGYuCWwcoh7E/wB32rn52a1sZXUqxTAG6ND1zntRGVwehU0+z0izUCSz1SVWyQsUxJyT1xnpVtF06wuvKWy1GAL8xAJD5+uelZUivuiHnOQwyQQuP5VZtNFtr25jSUMdzYLAgN+dXcRaa4sp4/JH9oNGCMGaVyF564zVt49Lm/jnK+zuM8//AFqjvNAtdNux5JfMTDaWIP58VdttIglhnnYfvMj+BPX6UmwMVrUxtE0ckyICTmSZzwT+FbF80pkQRK0kEYAZhK+wZ+jVBfTmxVZI1TepCjcg6VeW8mmR5C+0jb8qgAflU8xRLaxmGNCstuVznDSSdf8AvqtZr+7XyVlu4ACMEBpMd+fv1V1FTDa+cHJY4PIGP5VK2npGq3QZvMK55AI6emKLgUnh3hVMBuWJYDYzAtz1+9Wna6NO0vmYFsoTJjkeTJx7bsVzXiDUprHYYtgLbcnYKLS9lknIZs8MOp9qaBG9NbxS2jKbq3wpHyxg7uvruqG1tBNcTQI8eP4drN0x3+eq8MatIFAVAy87VAz+lUrW6afV1hZUC7wmVUAkYNO4GpdaLeXduI4ZAix8FY5HGQDgHG+qV14TuXjdpLqIsv8AfLkYx7t1rZuGNrbiGM7UUBh8oznA74rEbxXeXRCMkIXJHyp6fjUWuUjDjVNP8i5ju4ftVtIC6rLsV+fdvTNe7agtt4Z+HuueIdJmE2oR6TJMkDEAb1jLKcYOQDg4IOcV4Jrmpy3FxHAyRhJQd2Fwehr0HR76S/8ADt/bzYdG0uSLvnaYzShLlbFJbHiX7Ivjfxl8WtS8cXOt+L7ya7jW0kDzsDgYuOEGMIOnCgA8elelfHbxNq/wu8FpdWmvPqus3E8cOnWJjZ2nkIVWK4X5SFZjz6Y7iuK/Zd+F+neFrObVLK/1DzdStgtxDJIhjO1jggBAcjJ79zXpHxI8HW2qCwklu7xWjuA3ySAbvmU4OV9h0qnLW5m3ZHz1+z/4m8Y/Ce+h8F+IYbjR7DUpjcWUzkyIszOiMrFNwVTszzjBBP8AFXV/Hr4g+N/Bngee5stUgY/2kbeV4kLhFZSwI3DHVlFd/qnw/s5rZAb2+UiQPuV0BJBPX5fxrn/jL4Etdb8J6rYXN9e/Z5dRhZgrIDxGnT5P9kUc4ou58wfDTx5da940upPE2pm8lu4QiSXnzAupAVV7Lxnt2r3VW06zVo5NKcuhzxaqfxrx7xF8GdF0PRbm/trvUDPDbPcJvkTG5QxHRB6CvQfDfjfUbzRrC4lEJkkijd8BgCxQZPX2o5ubUo7Rda0Wxs/tWp2y2VqoJaa6gCIB7sOhriLP9rHw1YW93aPpOpzJzFHJCYwrICQpwSCOMVj/ABw8X31x8PbizYRCG4mjR8Bs4B3cZPqor5tbqaVlLcNj7u+H/wAR/DnjLw/FeaZBG0q4M9q1uJJ4myfvYHQ+td/DrGivGCLBox1dW04n/wBl/wA5r4f/AGf/ABBeaD4+UWrKFuYHjlVhkMuN3T6ivq2PxNdKowkOGBfG09QufWq5VuK5ofEr4k+Cvh5pY8QRNGt8lwkD2EKGO5nUn59qMRgYycnjiuLsf2yvCetXWmafc2d/b27yLHJPeQx+Uilhy5Dk8YHIFeKftKXsmueOkFxtUW2lo6CMYyS7ZyTnNeKt69aXKr6mh+m1vN4bvnYw2MF/EePOtbbfGc8gqwGCMehrUSx0VfMMmnM8Sqd6/ZJAfzxxXjH7NniW7j+FMFttidLW4aOJmU5C4zjrXrI8TXEcay+RAzH5juDYP61OrEcZ4q/aI8DfBzxNPoM0k12ska3Df2comWBmyCjEsPm4BwOlXPhp8YfAnxa1bUVtbkxSWsSuIb9TE8iliWKKG+bGQPXnpX58a7cPfa1qFzJtEktxJI20YGSxJxXSfDj/AIl/iLS9QiP+kQzI8e7kKQw5x/nrT5UkNvU/S7zPDN4ywxeZEyjIH2ecY445xXH+OtPsNJbT3sL2ZHeWRZElEmO2CPMHFdpp+rS3McLNHECyKx2rjJIBJ61hePZvtmnRLLHG/lyqVLICRwe5rOVx6HO2M1zuRV1EbO5KRn+laWpaOda8P39ld36zW9xCY5InijIK9eRVCzsbaSRg9vE/GclB7VtW9rbrG6i2h6ddgz0rPmsHKcbb/Cvwra2qyLpEUj7QHVrXd0wOCF7da2R8GPCkdp9pudNtfK4AMVuDvywAIG2uV+M11c2/hK+e1uZbOWOSApJAQCu47T1BHI9q8Ak8Qa7Z2pmi8QakGjBZVMoKgjuFK4H4V0zai2rGMXc+upvgz4ZudJlns9Itllg+eOQWoVhgZDDIHQ16vHYm+0+J11BdzxqxPloRyPrXlnw31S5uvBmmSTStM8ljGXZyfmPA5/M13Gg6VZJoNgfskLFolzuQGspWsmaxvexx/wAWvhvpnia80GbWRa6hDbtNErSQruVmw30xha5uz+B3gnzFii0TTpncks8ltt/AHaP8ivS9Ytbd4YZfs8aPHOANq49etfJ/7V3xC8ReE/HlhbaPqs2n28+mCdo4guA4LYYEgkfhTUvd2Dlbla57LcfBnwLpMot59AsTKx3Lm34xnHpxW9oHwj0bwj4gs9T0PTrSwNxE8MjLDwyHkDGR3UV8j/BH4yeMfEPxa8NWGqa3Pf2t3IfOScKxbCuRzjPUCvtfVrhryztVm/eqLhWCsTgHOOOfc1Wkr2WwmnGxuN4flVPv2m3Gcm2/X71eT/8ACrdF0zx1rN/d6bHOupPveO3Zoldjja3XAPX8671YYWj3GFcj3PqfeqF5ZxNebCmY32MUbkd/WslsX2PN4vgd4N+zma70eOSeZmKsybnxuIHzUzR/2e/Bd9M6rpSmIc7ZEKsfT8K9KlIj0cQoqoqRSIhUYKjaTwa+drfxRr7SI0ev6jA0akhopgO5GDxyOKtyUbGXmdvJ8D/BFvNPHc6PAsyAcoG5JHA4q9p3wX8N+GyL2DTJXiuU2tBHIw54wRnvXD+E/FWtnxVo0U2r3l1HNeIsizSZDjPevobWNt5a3ccqKUZ14x06dKSkpXQzzf4d/D+z8O+JLm6tbVG+3o6S/bSZCCrZHB49uK9HOi27cta2A2/9MKyLext7W3sRHEFKyZ3BiDyTnkGtXeNyLs4Oc/O/t70pWLjdnj//AApXQdS1rWHvbRYZWuXcKbl1VgxyMc8DGO1Oj+AnhWaFpIrKRUXgbbp/mOcdjXoN8os9avvKyD5ZwxJJHyHp+Qr4uv8A9p/x9a3kiRalEituVv3Wc4JA6n0ArTTRE2bV7n0Xb/s++GL7Igu5FY5/dreSbhjr/FXW+Efh2uj6S2mxxW86WcrKstwxkkIPPJxmvPf2bfiJq/jrwzql9qjQtPbXaRRmJNoA2g569a9ajeWTWLpvPmTKrlUkYA/r70nZxugs72KviDwINU8P39k9nbp50W3zLd2jdeRyrADBrz2P4L6PDEJTqF8jMB8q6nLn/wBCr1RmmbI+1XAH/XVv8a8s+JXi7UvC3gmbUbKRGuI5UT98gYMCMEH1qY2s2x2d7EWofA23jiWUajqcfHzbdRlJTnp9+iH4Nlbd7m01jVrhoCH2SahLtyOSGG6vHf8AhoLxgsjWxurd4Y2+UNCM/TOa+kPDWsXOoaDp1zKy+dcWod2UYyT1q1yt2sKScdbmpDo6TW8cv2GBGdAflmbqfXinJoMjrtayiYevntx+lU9PknexTN1N8uQMN7mnwtcfNILy43cD7/FQA5tFePIe3Ur/ALN0wx+lcn4ts2sZhdNb+TEI1HmMxmUnOAOcY7c11nnXEjPuupjt56j/AArhfi1qV3pvhO8uY7h3KW8pEcmCmdvBIx2qbX3LW5Dp8gZQzJCFOCV8o/iOta7SWybViS12sOd0L/418eab8ZPGMbqv9tzFE52lEwcdj8vSvqXw/wCIrrUfD+n3cqxiW4gV3CqQMn05qvZpE8zOpsPJYSb1tUUcAeQ2P50vkw3Kk7bdlU4Q+Wy5/DdWbb61curKSuB06/4189fFD4z+LPD/AMRNYsdP1Bba0hdQsIhVhzGpzyDzzS5ew031PpBljhVin2V+oKhX/lmoPtaf8+0H/ft/8a8/+DPj7WPFWhXj6nMtxLBLhZdu1jn1xx+leg/2hN/e/U0rDP/Z)**

**Introduction**

**Imagine that you are an intrepid reporter with an amazing scoop: you have twenty-four hours of exclusive access three decades of e-mails sent within a corrupt corporation. You know there’s dirt and scandal there, but it has been well-concealed by the corporation’s political friends. How are you going to understand this haystack well enough to explain it to your devoted readers under such a tight deadline?** Unlike this vignette, interacting with large text data sets is often posed as a needle in a haystack problem. The poor user—faced with documents that would take a decade to read—is looking for a single needle: a document (or at most a handful of documents) that matches what the user is looking for: a “smoking gun” e-mail, the document that best represents a concept or the answer to a question These questions are important. The discipline of information retrieval is built upon systematizing, solving, and evaluating this problem.

Each day humans generate massive volumes of data in a variety of different forms. For example, digitized texts provide a rich source of political content through standard media sources such as newspapers, as well as newer forms of political discourse such as tweets and blog posts. Analytics Industry is all about obtaining the “Information” from the data. With the growing amount of data in recent years, that too mostly unstructured, it is difficult to obtain the relevant and desired information. But technology has developed some powerful methods which can be used to mine through the data and fetch the information that we are looking for.

One such technique in the field of text mining is Topic Modelling. As the name suggests, it is a process to automatically identify topics present in a text object and to derive hidden patterns exhibited by a text corpus. Thus, assisting better decision making. Topic Modelling is different from rule-based text mining approaches that use regular expressions or dictionary-based keyword searching techniques. It is an unsupervised approach used for finding and observing the bunch of words (called “topics”) in large clusters of texts.

A picture containing clock

Description automatically generated

**A little history…**

***The One Hundred Tenth United States Congress was a meeting of the legislative branch of the United States federal government, between January 3, 2007, and January 3, 2009, during the last two years of the second term of President George W. Bush. It was composed of the Senate and the House of Representatives. The apportionment of seats in the House was based on the 2000 U.S. Census.***

**Analyses and models**

**About the data**

Two datasets will be used in this project. The first one contains one folder with 15 text files: about dog, travel, and virus. Those small data sets are added just for evaluation methods. The purpose was to see if the main three topics in those small corpuses can be determined.

|  |  |
| --- | --- |
| **Fig. 1 Wordclould on DOG A close up of text on a black background  Description automatically generated**  **Fig. 3 Wordclould on Virus** | **Fig. 2 Wordclould on TRAVEL A picture containing text  Description automatically generated** |

A close up of text on a black background

Description automatically generated

**The text files were combined and vectorized with Count Vectorizer, stop words had been removed. The final data frame was prepared for the LDA.**

A picture containing photo, computer, black, white

Description automatically generated

**The second dataset is the text collection from the House floor debate of the 110th Congress.** According to political scientists, there are usually 40-50 common topics going on in each Congress. **The  data started out in four subfolders, divided first by political party and then by gender.**

A close up of a logo

Description automatically generated

**Those folders were merged together for the final model. The data was processed by  removing stopwords, eventually adding to this stopword list. CountVectorizer was used to  lowercase and vectorize the data, regex was used for additional tokenizing and the LDA  model was applied to this data.**

**There were few approaches. The purpose of the paper is to determine the main topics of the 110th Congress, not the topic per each person, as is which topic did an individual talked more or less.**

**Models**

**Topic Models are a type of statistical language models used for uncovering hidden structure in a collection of texts. In a practical and more intuitively, you can think of it as a task of:**

* **Dimensionality Reduction, where rather than representing a text T in its feature space as {Word\_i: count(Word\_i, T) for Word\_i in Vocabulary}, can be represented it in a topic space as {Topic\_i: Weight(Topic\_i, T) for Topic\_i in Topics}**
* **Unsupervised Learning, where it can be compared to clustering, as in the case of clustering, the number of topics, like the number of clusters, is an output parameter. By doing topic modeling, clusters of words are built rather than clusters of texts. A text is thus a mixture of all the topics, each having a specific weight**
* **Tagging, abstract “topics” that occur in a collection of documents that best represents the information in them.**

**There are several existing algorithms that can be used to perform the topic modeling. The most common of it are, Latent Semantic Analysis (LSA/LSI), Probabilistic Latent Semantic Analysis (pLSA), and Latent Dirichlet Allocation (LDA)**

**LDA**

**LDA is a generative probabilistic model that assumes each topic is a mixture over an underlying set of words, and each document is a mixture of over a set of topic probabilities.**

The generative process of LDA can be described as, given the *M*number of documents, *N*number of words, and prior *K* number of topics, the model trains to output:

*psi*, the distribution of words for each topic *K*

*phi*, the distribution of topics for each document *i*

A screenshot of a cell phone

Description automatically generated

**MALLET**

MALLET is a Java-based package for statistical natural language processing, document classification, clustering, topic modeling, information extraction, and other machine learning applications to text.

MALLET includes sophisticated tools for document classification: efficient routines for converting text to "features", a wide variety of algorithms (including Naïve Bayes, Maximum Entropy, and Decision Trees), and code for evaluating classifier performance using several commonly used metrics. In addition to classification, MALLET includes tools for sequence tagging for applications such as named-entity extraction from text. Algorithms include Hidden Markov Models, Maximum Entropy Markov Models, and Conditional Random Fields. These methods are implemented in an extensible system for finite state transducers.

**PART 1**

**For the first part, the folder containing 15 text files based on 3 topics will be analyzed with MALLET and LDA.**

* **MALLET**

**For Mallet, the spotwords were removed from the text and n-gram sized were determined. The number of topic set was 3. The output of the model presented top key words for each topic, as well was the probability for every document that they belong to each topic.**

**Top key words:**

|  |  |  |
| --- | --- | --- |
| ****0**** | **1.13228** | **viruses cell virus potato insects infect traveling addition immune infections viral pathogenic hosts plant generally host machinery infects isn't animal** |
| ****1**** | **1.82578** | **dogs dog make life plant viruses i'm body benefits home attention leave love family walking great live blood skin present** |
| ****2**** | **0.5555** | **attention gut beneficial communities microbial technology relationship true mobile referred bacteriophage bacteria types susceptible made you'll retrospect scary zone comfort** |

**Probabilities:**

|  |
| --- |
| **0 Dog\_Travel\_Virus/D1.txt 0.1619640456857358 0.7770684003638487 0.06096755395041532**  **1 Dog\_Travel\_Virus/D2.txt 0.1558553189253463 0.7477600528731576 0.09638462820149594**  **2 Dog\_Travel\_Virus/D3.txt 0.14492330189936475 0.6953106036934747 0.15976609440716036**  **3 Dog\_Travel\_Virus/D4.txt 0.20190592681385106 0.6333672047135863 0.16472686847256263**  **4 Dog\_Travel\_Virus/D5.txt 0.07298638747102239 0.8912062833992437 0.03580732912973398**  **5 Dog\_Travel\_Virus/T1.txt 0.43632803671005804 0.4635095534789091 0.10016240981103278**  **6 Dog\_Travel\_Virus/T2.txt 0.042705636824125905 0.9363428563751917 0.020951506800682362**  **7 Dog\_Travel\_Virus/T3.txt 0.3312318496242474 0.6387631646522179 0.030004985723534626**  **8 Dog\_Travel\_Virus/T4.txt 0.06766225902610838 0.21659808892517673 0.7157396520487149**  **9 Dog\_Travel\_Virus/T5.txt 0.5192431413374553 0.4522895215154512 0.02846733714709342**  **10 Dog\_Travel\_Virus/V1.txt 0.7890817394556153 0.18914556245458683 0.021772698089797853**  **11 Dog\_Travel\_Virus/V2.txt 0.6948482114236451 0.21768228516418373 0.08746950341217126**  **12 Dog\_Travel\_Virus/V3.txt 0.6166379025389678 0.3152400796693515 0.06812201779168067**  **13 Dog\_Travel\_Virus/V4.txt 0.865247758181132 0.11766709327171145** 0.017085148547156575  **14 Dog\_Travel\_Virus/V5.txt 0.09471087074653262 0.5696913164380284 0.33559781281543893** |

* **LDA**

**Count Vectorizer was used to transform the text and remove stop word and top 10 most common words were visualized.**

A screenshot of a cell phone

Description automatically generated

**Dog and dogs were in the top 3, so stemming or lemmatization would be a solution to that.**

A screenshot of a cell phone

Description automatically generated

**We can notice some changes in the word order after stemming or lemmatization.**

**Not stemmed:**

|  |
| --- |
| A close up of text on a black background  Description automatically generated |

**Stemmed:**

|  |
| --- |
| A picture containing outdoor, sitting, black, holding  Description automatically generated |

A screenshot of text

Description automatically generated**Again, the number of topics was set to three. In the not stemmed version, the three topics are more obvious - the first is raveling, second: virus and third dog.**

**Word ‘dog/s’ appear in all the topics, probably people travel with dogs, or dog get viruses.**

A screenshot of a cell phone

Description automatically generated**In the stemmed version the traveling toping seems to be mixed in the other two.**

|  |
| --- |
| A close up of a map  Description automatically generated |

**From the plot it noticeable that the virus topic is determined well, but dog and travel have the same size. Better results might be obtained adding more text for dog and travel topics.**

**PART 2**

* **MALLET**

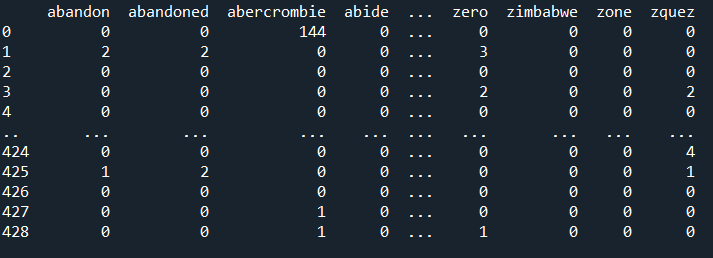
**Stop words were removed and n-gram range was set for the tuning parameter.**

|  |
| --- |
| **0 0.01337 jackson-lee\_texas text\_jackson-lee docno\_jackson-lee united\_states texas\_speaker homeland\_security texas\_madam civil\_rights transportation\_security human\_rights distinguished\_colleague texas\_chairman important\_legislation black\_caucus congressional\_black state\_texas houston\_texas judiciary\_committee attorney\_general introduced\_distinguished**  **1 0.46193 urge\_colleagues speaker\_rise support\_h.r rise\_today health\_care strong\_support colleagues\_support mental\_health today\_support rise\_strong rise\_support health\_insurance colleagues\_join head\_start today\_strong chairman\_rise support\_legislation important\_legislation president\_bush support\_bill**  **2 0.02839 health\_care health\_insurance medical\_liability tim\_murphy text\_kagen docno\_kagen murphy\_pennsylvania text\_burgess docno\_burgess physician\_workforce state\_texas food\_drug care\_system drug\_administration medicare\_system medicare\_patients floor\_house deal\_georgia health\_savings energy\_commerce**  **3 0.01737 border\_patrol patrol\_agents drug\_smuggler north\_carolina jones\_north text\_kaptur docno\_kaptur american\_people ramos\_compean illegal\_immigration wall\_street united\_states marine\_corps global\_warming text\_jones docno\_jones agents\_ramos text\_rohrabacher docno\_rohrabacher illegal\_aliens**  **4 0.07502 tax\_increase tax\_increases largest\_tax raise\_taxes increase\_american tax\_cuts democrat\_majority american\_history ryan\_wisconsin raising\_taxes tax\_relief side\_aisle campbell\_california federal\_government text\_hensarling docno\_hensarling social\_security federal\_budget balance\_budget democrat\_budget**  **5 0.05459 moran\_virginia text\_holt docno\_holt tom\_davis davis\_virginia text\_moran docno\_moran virginia\_speaker text\_wolf docno\_wolf holt\_speaker text\_tom docno\_tom iraq\_study north\_carolina human\_rights miller\_north study\_group district\_columbia virginia\_madam**  **6 0.03748 text\_yarmuth docno\_yarmuth text\_ellison docno\_ellison text\_hodes docno\_hodes text\_etheridge docno\_etheridge text\_sires docno\_sires text\_pascrell docno\_pascrell north\_carolina text\_solis docno\_solis text\_schwartz docno\_schwartz working\_families text\_carnahan docno\_carnahan**  **7 0.0276 walden\_oregon text\_kucinich docno\_kucinich rural\_schools text\_defazio docno\_defazio oil\_companies secure\_rural rogers\_michigan text\_walden docno\_walden great\_lakes wall\_street text\_stupak docno\_stupak schools\_community self-determination\_act community\_self-determination county\_payments kucinich\_speaker**  **8 0.04328 bishop\_utah veterans\_affairs national\_park docno\_bishop text\_bishop speaker\_yield time\_consume park\_service time\_text yield\_time text\_rahall docno\_rahall text\_filner docno\_filner text\_grijalva docno\_grijalva department\_veterans natural\_resources boyda\_kansas mrs\_boyda**  **9 0.03943 human\_rights united\_states united\_nations foreign\_affairs time\_consume support\_resolution yield\_time text\_ros-lehtinen docno\_ros-lehtinen smith\_jersey strong\_support speaker\_yield madam\_speaker tom\_lantos speaker\_reserve north\_korea rise\_strong text\_payne docno\_payne text\_berman**  **10 0.06617 natural\_gas gas\_prices crude\_oil continental\_shelf oil\_gas outer\_continental american\_energy oil\_natural burton\_indiana mrs\_bachmann text\_westmoreland docno\_westmoreland peterson\_pennsylvania energy\_prices energy\_bill energy\_policy lower\_gas million\_barrels barrels\_oil price\_gasoline**  **11 0.02328 south\_carolina united\_states wilson\_south text\_poe docno\_poe that's\_text poe\_speaker madam\_speaker text\_wilson docno\_wilson carolina\_speaker franks\_arizona god\_bless bless\_troops conclusion\_god troops\_forget forget\_september barrett\_south september\_text world\_war**  **12 0.04004 intelligence\_community foreign\_intelligence america\_act protect\_america mrs\_wilson wilson\_mexico intelligence\_surveillance intelligence\_authorization intelligence\_committee national\_intelligence national\_security act\_fiscal director\_national mccaul\_texas surveillance\_act authorization\_act text\_langevin docno\_langevin civil\_liberties text\_hoekstra**  **13 0.02446 text\_hoyer docno\_hoyer program\_house legislative\_program text\_blunt docno\_blunt hoyer\_legislative blunt\_legislative ways\_means brady\_texas means\_committee weller\_illinois trade\_agreement hoyer\_gentleman house\_meet tax\_relief text\_rangel docno\_rangel neal\_massachusetts english\_pennsylvania**  **14 0.04759 davis\_illinois post\_office docno\_davis text\_davis office\_building illinois\_speaker government\_reform oversight\_government committee\_oversight building\_house speaker\_yield time\_consume yield\_time postal\_service read\_title balance\_time time\_text reserve\_balance clerk\_read house\_committee**  **15 0.06007 blue\_dog dog\_coalition scott\_georgia blue\_dogs coalition\_house national\_debt text\_scott docno\_scott fiscally\_conservative text\_ross docno\_ross wilson\_ohio democratic\_blue patrick\_murphy fiscal\_discipline murphy\_pennsylvania tax\_money ross\_blue conservative\_democratic lincoln\_davis**  **16 0.03363 van\_hollen text\_mcgovern docno\_mcgovern text\_woolsey docno\_woolsey occupation\_iraq mcgovern\_speaker mcgovern\_providing bring\_troops troops\_home woolsey\_speaker text\_van docno\_van text\_stark docno\_stark text\_pelosi docno\_pelosi iraqi\_people text\_delauro docno\_delauro**  **17 0.03792 price\_georgia mrs\_blackburn text\_price docno\_price majority\_party text\_foxx docno\_foxx truth\_squad american\_people official\_truth georgia\_speaker squad\_house foxx\_speaker north\_carolina broun\_georgia blackburn\_speaker georgia\_official gas\_prices georgia\_chairman federal\_government**  **18 0.03145 fossil\_fuels years\_ago fossil\_fuel peak\_oil chart\_shows united\_states oil\_production oil\_world percent\_world's bartlett\_maryland amount\_oil king\_hubbert text\_markey docno\_markey oil\_gas million\_barrels world's\_oil natural\_gas saudi\_arabia hyman\_rickover**  **19 0.02278 udall\_colorado text\_sutton docno\_sutton text\_udall docno\_udall text\_gohmert docno\_gohmert text\_hare docno\_hare fast\_track trade\_deals trade\_agreement udall\_mexico free\_trade trade\_policy text\_schakowsky docno\_schakowsky sutton\_speaker gohmert\_speaker text\_walberg**  **20 0.06592 lewis\_california text\_lewis docno\_lewis lewis\_georgia budget\_resolution con\_res sam\_johnson johnson\_texas text\_boehner docno\_boehner weldon\_florida tax\_cuts text\_spratt docno\_spratt budget\_fiscal resolution\_budget fiscal\_year fiscal\_years concurrent\_resolution camp\_michigan**  **21 0.00943 king\_iowa united\_states docno\_king text\_king text\_pence docno\_pence rule\_law health\_insurance states\_america floor\_congress iowa\_speaker social\_security north\_slope fairness\_doctrine percent\_poverty iowa\_gentleman judiciary\_committee southern\_border commander\_chief pence\_speaker**  **22 0.02396 barton\_texas text\_conyers docno\_conyers smith\_texas speaker\_yield text\_barton docno\_barton judiciary\_committee conyers\_speaker text\_dingell docno\_dingell texas\_speaker energy\_commerce text\_smith docno\_smith text\_chabot docno\_chabot law\_enforcement commerce\_committee small\_business**  **23 0.03154 text\_gingrey docno\_gingrey embryonic\_stem stem\_cell stem\_cells cell\_research text\_stearns docno\_stearns gingrey\_speaker text\_kingston docno\_kingston text\_carter docno\_carter text\_pitts docno\_pitts stearns\_speaker adult\_stem air\_force general\_petraeus charlie\_norwood**  **24 0.06788 working\_group group\_house wasserman\_schultz ryan\_ohio health\_care american\_people meek\_florida it's\_important text\_ryan docno\_ryan text\_meek docno\_meek florida\_working ohio\_working text\_wasserman docno\_wasserman walter\_reed oil\_companies white\_house republican\_side**  **25 0.04917 text\_altmire docno\_altmire mental\_health great\_lakes text\_emanuel docno\_emanuel text\_kirk docno\_kirk mental\_illness altmire\_working text\_kennedy docno\_kennedy text\_sestak docno\_sestak moore\_wisconsin lake\_michigan emanuel\_speaker altmire\_speaker rhode\_island health\_parity**  **26 0.04541 coast\_guard eddie\_bernice text\_oberstar docno\_oberstar bernice\_johnson johnson\_texas water\_resources transportation\_infrastructure great\_lakes passenger\_rail text\_eddie docno\_eddie development\_act resources\_development committee\_transportation oberstar\_speaker chairman\_oberstar text\_cummings docno\_cummings brady\_pennsylvania**  **27 1.34874 house\_representatives text\_doc docno\_text doc\_docno doc\_doc act\_house united\_states madam\_speaker american\_people balance\_time time\_text june\_docno representatives\_june july\_docno representatives\_july health\_care representatives\_docno representatives\_september september\_docno speaker\_yield**  **28 0.02131 murphy\_connecticut klein\_florida hall\_york text\_blumenauer docno\_blumenauer text\_murphy docno\_murphy mrs\_mccarthy mccarthy\_york connecticut\_working text\_klein docno\_klein docno\_hall text\_hall text\_perlmutter docno\_perlmutter york\_speaker mahoney\_florida york\_madam blumenauer\_speaker**  **29 0.03441 george\_miller miller\_california higher\_education head\_start text\_george docno\_george student\_loan text\_mckeon docno\_mckeon education\_act keller\_florida young\_alaska bishop\_york native\_hawaiians student\_loans education\_labor pell\_grants pell\_grant students\_families chairman\_yield**  **30 0.03442 defense\_authorization national\_defense armed\_services scott\_virginia act\_fiscal authorization\_act fiscal\_year year\_house text\_hunter docno\_hunter services\_committee duncan\_hunter text\_skelton docno\_skelton mrs\_drake hunter\_national missile\_defense mrs\_tauscher docno\_scott text\_scott**  **31 0.03132 garrett\_jersey text\_garrett docno\_garrett text\_pallone docno\_pallone walz\_minnesota text\_cohen docno\_cohen kline\_minnesota pallone\_speaker american\_public cohen\_speaker text\_walz docno\_walz state\_jersey text\_levin docno\_levin minnesota\_speaker johnson\_georgia text\_kline**  **32 0.04602 appropriations\_act related\_agencies agencies\_appropriations docno\_obey text\_obey text\_flake docno\_flake representatives\_june development\_related june\_docno appropriations\_committee chairman\_yield homeland\_security north\_carolina services\_education interior\_environment education\_related labor\_health acting\_chairman price\_north**  **33 0.03925 frank\_massachusetts text\_frank docno\_frank affordable\_housing public\_housing mrs\_biggert financial\_services mrs\_capito federal\_housing chairman\_frank housing\_finance text\_waters docno\_waters housing\_fund reform\_act flood\_insurance trust\_fund finance\_reform fannie\_mae freddie\_mac**  **34 0.03021 providing\_consideration consideration\_h.r rules\_committee previous\_question hastings\_washington text\_hastings docno\_hastings welch\_vermont hastings\_florida text\_sessions docno\_sessions vote\_previous washington\_providing democrat\_majority text\_welch docno\_welch closed\_rule sessions\_providing underlying\_legislation text\_arcuri**  **35 0.03759 national\_science science\_foundation science\_technology research\_development clean\_energy text\_inslee docno\_inslee mrs\_miller miller\_michigan gordon\_tennessee hall\_texas text\_ehlers docno\_ehlers math\_science air\_force global\_warming text\_lampson docno\_lampson carbon\_dioxide text\_tiahrt**  **36 0.0434 farm\_bill text\_dreier docno\_dreier peterson\_minnesota dreier\_providing dreier\_speaker smith\_nebraska text\_goodlatte docno\_goodlatte text\_peterson docno\_peterson docno\_andrews text\_andrews friend\_yielding text\_kind docno\_kind farmers\_ranchers agriculture\_committee safety\_net docno\_doggett**  **37 0.03164 green\_texas mrs\_capps gene\_green corrine\_brown brown\_florida text\_boustany docno\_boustany text\_shea-porter docno\_shea-porter text\_gene docno\_gene text\_terry docno\_terry texas\_speaker text\_green docno\_green text\_corrine docno\_corrine gulf\_coast health\_centers**  **38 0.02607 jones\_ohio mrs\_jones braley\_iowa larson\_connecticut text\_mcdermott docno\_mcdermott congressional\_black black\_caucus text\_braley docno\_braley african\_american text\_sarbanes docno\_sarbanes mcdermott\_speaker rollcall\_vote text\_larson docno\_larson foster\_care text\_akin docno\_akin**  **39 0.04492 text\_mrs docno\_mrs homeland\_security mrs\_maloney maloney\_york thompson\_mississippi mrs\_lowey department\_homeland mrs\_davis davis\_california loretta\_sanchez sanchez\_california york\_city king\_york text\_thompson docno\_thompson york\_speaker california\_speaker coast\_guard text\_crowley** |

**The table illustrates the top key words in each topic. Topics like taxes, oil, budget, emigration, healthcare, finance, education and more were discussed.**

* **LDA**

**The dataset for this part of the project is really big. All text files were combined together and vectorized.**



**Few approaches were examined here: removing stopwords and extending the stopword list, adding bigram range to the vectorizer. At the begging only part of the data was modeled, illustration only 5 topics. After determining the correct parameters, all the data was included in the model.**

|  |
| --- |
| A picture containing drawing  Description automatically generated |

|  |
| --- |
| **LDA 110th Congress data Model:**  **Topic 0:**  **[('illinois', 2337.363221374241), ('trade', 1735.593096602659), ('davis', 1363.673057544668), ('colombia', 1139.206349946253), ('bill', 1039.140312082878), ('america', 924.9202286006504), ('agreement', 914.8610579609617), ('percent', 746.8296477334674), ('united', 697.412277118433), ('office', 661.0123417092086)]**  **Topic 1:**  **[('veterans', 3889.932444679885), ('bill', 2589.6832278430934), ('military', 1430.9844798622319), ('war', 1083.4335412052433), ('care', 998.8851991328202), ('defense', 982.6036663243822), ('kansas', 829.8492568417716), ('iraq', 772.7514502062334), ('troops', 745.3774715473244), ('appropriations', 745.2130157989582)]**  **Topic 2:**  **[('bill', 6731.186144821158), ('health', 5123.807909095634), ('children', 3917.3032094569917), ('national', 3340.3010730223014), ('colleagues', 3313.590487430973), ('nation', 3197.5699849095354), ('program', 3054.269064575664), ('rise', 2906.9613018781533), ('care', 2884.564536876671), ('education', 2792.8866688540866)]**  **Topic 3:**  **[('bill', 3.793605105583342), ('years', 2.175903936551383), ('energy', 2.1435337737637323), ('amendment', 1.558755054179193), ('health', 1.4896442026716683), ('oil', 1.486034211318874), ('war', 1.4661529555728885), ('fact', 1.4478399779510671), ('iraq', 1.4253818984659008), ('world', 1.4197224001082989)]**  **Topic 4:**  **[('bill', 1.3533783021559946), ('health', 1.3366823297455397), ('care', 1.1827104458119455), ('years', 1.0464340301985764), ('iraq', 0.7809436807008251), ('energy', 0.7770441874001162), ('national', 0.7545491722991542), ('colleagues', 0.7370504458108462), ('first', 0.6940436660378335), ('gentleman', 0.6904305728124017)]**  **Topic 5:**  **[('bill', 14820.971777622013), ('iraq', 8034.90623235589), ('amendment', 4880.582345136917), ('security', 4443.780074426326), ('war', 4291.291797010202), ('years', 4260.8293825472565), ('intelligence', 4196.773248637932), ('national', 4191.192032981303), ('colleagues', 3745.4955185856275), ('must', 3670.465327590365)]**  **Topic 6:**  **[('bill', 2.2269847667067117), ('years', 1.223708479014138), ('national', 1.0426124249432274), ('back', 0.8051568429845312), ('percent', 0.800069116036417), ('health', 0.7938598600741831), ('energy', 0.7787920864921993), ('colleagues', 0.7668247221867894), ('oil', 0.7514161661853137), ('amendment', 0.7455317959629245)]**  **Topic 7:**  **[('indiana', 507.7133254629043), ('burton', 228.76135001506216), ('julia', 100.83304064310506), ('drill', 100.5253487119635), ('indianapolis', 79.0212035970391), ('carson', 71.85288324279097), ('colleagues', 53.63772688095205), ('energy', 51.18837943824707), ('colts', 49.93247863049036), ('autism', 47.78909329446264)]**  **Topic 8:**  **[('bill', 4.595224494903617), ('years', 2.14840473938267), ('care', 1.588255640032343), ('health', 1.5757729339810547), ('energy', 1.532981946922789), ('children', 1.4282487409723905), ('percent', 1.3788020511645576), ('colleagues', 1.3650143639605918), ('united', 1.35802403263779), ('fact', 1.3432767901637825)]**  **Topic 9:**  **[('rule', 1856.0493298954173), ('rules', 1611.3123991549971), ('consideration', 1366.9868743987554), ('providing', 922.1451689699055), ('friend', 846.7925564420559), ('fact', 676.2560689484305), ('dreier', 647.5183924857984), ('bill', 626.0300823568809), ('hastings', 567.8889303109313), ('debate', 541.04674035514)]**  **Topic 10:**  **[('bill', 3.450828473501254), ('oil', 2.1135618695524583), ('years', 2.0898016217939244), ('energy', 2.058865354366355), ('program', 2.015547190810434), ('back', 1.3478586555760443), ('health', 1.2873603311174737), ('united', 1.2452190117574107), ('percent', 1.2094360457489484), ('iraq', 1.1776158507500274)]**  **Topic 11:**  **[('bill', 4.213693767752288), ('amendment', 1.9111410781995533), ('program', 1.7668703306132105), ('health', 1.7282925518647743), ('first', 1.7048399795246072), ('national', 1.6142407312032185), ('families', 1.5458397647508668), ('security', 1.5264517962733657), ('colleagues', 1.4727214903284318), ('nation', 1.4624780412977567)]**  **Topic 12:**  **[('bill', 2.1958860922257504), ('years', 2.1095142531794626), ('energy', 1.8338703579359104), ('health', 1.558326702968786), ('program', 1.2248049850921083), ('first', 1.2107158687398523), ('gentleman', 1.0763381995531314), ('amendment', 1.0743827256859506), ('iraq', 1.0650223811612323), ('last', 1.0405294252692974)]**  **Topic 13:**  **[('bill', 3312.86959703776), ('security', 2971.1481667367098), ('united', 2739.671175462194), ('texas', 2327.869438828369), ('resolution', 1819.821529595938), ('nation', 1741.085972009138), ('colleagues', 1691.3558632145073), ('years', 1578.2351379077136), ('lee', 1551.1318699634455), ('jackson', 1547.7598540370436)]**  **Topic 14:**  **[('bill', 3.463946960388505), ('energy', 2.4818315480673236), ('years', 2.0138380154396835), ('oil', 1.9701621612619165), ('percent', 1.4282061246073636), ('world', 1.2291456106765946), ('program', 1.1952689075175915), ('united', 1.191100554745046), ('money', 1.1320246311577615), ('back', 1.1057967007747116)]**  **Topic 15:**  **[('space', 176.19322528212217), ('feeney', 119.11770670979796), ('immigration', 114.54172555323753), ('illegal', 108.11806037077841), ('bilbray', 107.55869883303572), ('akin', 103.60412052717957), ('alabama', 89.30883724358773), ('nasa', 87.40270233453616), ('bill', 59.40657986475601), ('america', 56.348734538888316)]**  **Topic 16:**  **[('iraq', 5458.151155607614), ('united', 5092.6090541674275), ('war', 3905.32130292668), ('world', 3288.711610495492), ('america', 3035.849073383531), ('years', 2786.575705212387), ('border', 2154.269130089667), ('law', 2103.006353091091), ('said', 2039.8020032373536), ('back', 2012.4582276269398)]**  **Topic 17:**  **[('buchanan', 24.317621176825146), ('business', 8.41596817162736), ('entrepreneur', 6.5154013334259915), ('dan', 6.377961109354469), ('tide', 6.292932531500308), ('small', 5.457860656906642), ('pastor', 5.254033519133768), ('red', 5.019923657440486), ('bill', 4.565751309093372), ('amendment', 2.546182692431331)]**  **Topic 18:**  **[('doggett', 123.99256777938068), ('austin', 13.818953789360652), ('indifference', 8.466234570990144), ('bill', 7.791595230965697), ('alert', 6.924875450457624), ('silver', 5.923959001632454), ('texas', 4.954150687167849), ('tax', 4.584183287766234), ('medicare', 4.069875420895967), ('richards', 3.7982223597809126)]**  **Topic 19:**  **[('bill', 5.40170282760379), ('years', 2.400371617618711), ('energy', 1.915865975874283), ('program', 1.709342551439512), ('oil', 1.6935611479005308), ('united', 1.5965961801661646), ('colleagues', 1.5610486421831284), ('said', 1.411349907218991), ('back', 1.403387969639134), ('national', 1.3710227452729262)]**  **Topic 20:**  **[('bill', 2.6982022544743125), ('energy', 1.6957965090737188), ('oil', 1.4673004178787237), ('years', 1.1270981010290368), ('national', 1.0320058404522185), ('united', 0.9862231832715784), ('war', 0.8737855285409695), ('said', 0.8650338110244361), ('tax', 0.843361477985783), ('world', 0.8421481505791412)]**  **Topic 21:**  **[('bill', 2.2445430838770277), ('blumenauer', 2.2090963880057473), ('years', 1.9219635363595573), ('united', 1.383066339025068), ('world', 1.3404425561878859), ('energy', 1.2250899201930439), ('iraq', 1.208551090732707), ('back', 1.1345320358391993), ('percent', 1.0868412202298696), ('care', 1.0430902902646504)]**  **Topic 22:**  **[('bill', 7.937584468819109), ('energy', 3.045606484782915), ('oil', 2.4572737116151147), ('years', 2.4067490107126273), ('last', 1.9795741838983525), ('national', 1.9623215852402258), ('colleagues', 1.8078310450891044), ('federal', 1.7144729950256707), ('said', 1.6861716244570395), ('america', 1.6431944786916033)]**  **Topic 23:**  **[('bill', 3.1943230570537757), ('years', 1.7703241162404693), ('energy', 1.7334878397403504), ('tax', 1.5528449680042156), ('oil', 1.3716168088284864), ('amendment', 1.342062703613168), ('health', 1.3319022290136897), ('national', 1.0470909313343357), ('colleagues', 1.0256379634963184), ('first', 0.9867652805130539)]**  **Topic 24:**  **[('iowa', 1304.3995535106144), ('braley', 213.7762823348441), ('loebsack', 91.80649363824728), ('small', 84.70629686283694), ('disaster', 75.55100407855215), ('businesses', 67.99105462125584), ('iowans', 65.82705650471986), ('business', 61.7985860257545), ('boswell', 58.1472811326453), ('cedar', 56.6194941317459)]**  **Topic 25:**  **[('health', 1558.2125663140055), ('care', 1201.5533223893613), ('medicare', 1019.9706789348744), ('medical', 853.0997150342452), ('insurance', 688.7783045836073), ('system', 624.5882284051906), ('bill', 553.8965860067451), ('program', 538.7568954209405), ('years', 507.6018925667032), ('texas', 506.7381596511708)]**  **Topic 26:**  **[('bill', 1341.30387471283), ('energy', 1183.8175821032376), ('national', 1162.4356420891463), ('science', 1081.166215026837), ('research', 878.1750397153148), ('technology', 759.5632317018894), ('space', 686.6424546280313), ('years', 552.4215422406851), ('program', 517.1698593373849), ('nation', 499.5567562415128)]**  **Topic 27:**  **[('carolina', 2827.669479376318), ('south', 1909.1344866335307), ('wilson', 1672.1496848238307), ('north', 781.1518898962258), ('god', 541.6734530083575), ('bless', 511.86405290166783), ('troops', 505.37795167457966), ('september', 499.29236867846913), ('never', 490.71456306377047), ('forget', 440.1674206172446)]**  **Topic 28:**  **[('bill', 1.9834025816639285), ('gentleman', 0.9163145145379856), ('years', 0.8158882984523679), ('right', 0.8095690621407772), ('health', 0.7975049571324573), ('last', 0.7948648988306716), ('iraq', 0.7694959603510411), ('take', 0.7636173266298142), ('united', 0.7478171130505359), ('care', 0.7456492408034253)]**  **Topic 29:**  **[('bill', 8110.476856485291), ('amendment', 4351.517581915151), ('gentleman', 3374.543031543612), ('program', 2575.6432150569863), ('energy', 2524.0805480665285), ('funding', 2314.3429052183856), ('appropriations', 2148.573379396887), ('million', 2131.160047860758), ('federal', 1905.1437417944658), ('development', 1749.6559701081183)]**  **Topic 30:**  **[('bill', 1.5490248736356256), ('care', 1.4919296662720312), ('health', 1.4106806759312018), ('program', 1.3198071658577142), ('energy', 1.2938563168482013), ('national', 1.1655923724659394), ('tax', 1.0521255710304778), ('percent', 1.0154390829464885), ('world', 0.9567679607163248), ('million', 0.9536134152625616)]**  **Topic 31:**  **[('oil', 6169.269507389887), ('energy', 4795.216079921032), ('gas', 2242.1155258436115), ('world', 1889.6796398335591), ('percent', 1739.5591691005627), ('years', 1504.1277177468862), ('use', 1375.867646818348), ('coal', 1202.2863475542697), ('natural', 1148.5166604066528), ('much', 956.5360619223641)]**  **Topic 32:**  **[('bill', 15351.150714298801), ('tax', 10323.938969541743), ('energy', 9689.758276745022), ('budget', 6243.547304846122), ('money', 6229.661698726767), ('gentleman', 6002.85915432751), ('said', 5924.351647890026), ('percent', 5546.755823190901), ('oil', 5534.913142341233), ('majority', 5478.745354687262)]**  **Topic 33:**  **[('cohen', 242.12679882685967), ('memphis', 158.97339362803032), ('tennessee', 81.15520877941623), ('king', 34.777371960169425), ('stax', 29.881524700915183), ('great', 27.414836492747362), ('bill', 25.035052221613114), ('music', 24.693602226831718), ('soul', 19.06958460905748), ('crow', 13.63983428249001)]**  **Topic 34:**  **[('bill', 2565.4638057230623), ('federal', 1375.1427300561656), ('national', 1261.0452041047702), ('oregon', 1225.6389457895584), ('county', 1211.2776559943677), ('land', 1165.738351591965), ('energy', 1005.032505877967), ('lands', 933.8204777759173), ('alaska', 921.2832784063619), ('rural', 903.3194446235015)]**  **Topic 35:**  **[('bill', 4.756296547326918), ('health', 2.983619314187673), ('veterans', 2.774867505547749), ('years', 2.6957613473140896), ('iraq', 2.620428433484171), ('tax', 2.46957000419683), ('energy', 2.379807652434531), ('right', 1.9504076318996253), ('care', 1.9088375795693096), ('children', 1.6878004067420709)]**  **Topic 36:**  **[('iraq', 4587.697535667827), ('care', 4070.7015128812145), ('health', 4057.5085135609233), ('children', 3279.7782373211107), ('years', 3074.437157850711), ('war', 2565.234608749865), ('working', 2530.703290108305), ('said', 2462.7314199966695), ('something', 2389.9997485888744), ('troops', 2218.3436103823497)]**  **Topic 37:**  **[('bill', 2.3679363654934003), ('years', 2.093067200581791), ('energy', 1.8461622228614785), ('oil', 1.589596108318668), ('health', 1.1594858178311263), ('much', 1.0609507265329934), ('united', 0.9793016582788726), ('percent', 0.9788669092896461), ('program', 0.9764766806891879), ('care', 0.9271645019441742)]**  **Topic 38:**  **[('california', 919.8176383696231), ('campbell', 248.99175826146842), ('orange', 40.42928379368547), ('money', 23.734564454631386), ('deficit', 17.887352543371332), ('bill', 13.757872261103008), ('spend', 11.385573541109553), ('proposed', 11.331077494497636), ('amendment', 9.982244575854113), ('county', 8.419176441056536)]**  **Topic 39:**  **[('bill', 2.8054599211787896), ('amendment', 1.2612870000614198), ('national', 1.2526278161917064), ('colleagues', 1.2501417693763925), ('oil', 1.2143705568361232), ('energy', 1.124012839733241), ('years', 1.0499484009750817), ('world', 1.0255508801413828), ('first', 0.9623162655823307), ('gentleman', 0.9552218899823103)]** |

**For future improvement more stop word can be removed. The model was run multiple times with different modifications to get better results.**

A screenshot of a cell phone

Description automatically generated

**Results**

**For the first part both MALLET and LDA were used. LDA performed better, distinguishing the three main topics. The problem here was that in the vocabulary in the traveling topic didn`t include that many typical words for the area. Another thing that was the choice of the text being stemmed or not reflected on the results. Overall LDA was determined to be better model.**

**For the second part 100th Congress data was modeled with the same two algorithms. MALLET performed faster, and there was no problem using the whole dataset there. Working with LDA was more time consuming. Due to the size of the data, it was really hard to run all of it with just basic computer due to memery issues. Some of thein topic like defense, education, healthcare and economy were discovered. There are a lot of overlapping toppings.**

**Conclusion**

Businesses generate and collect huge volumes of data every day. Analyzing and processing this data using automated topic analysis will help businesses make better decisions, optimize internal processes, identify trends and all sorts of other advantages that will make companies much more efficient and productive. It can help news websites tag articles for faster  discovery and more efficient (and personalized) user experiences. It can help archivers  categorize the backlog of analog data. It can help Natural Language Processing researchers  better understand social media data. There is almost no limit to the usefulness of topic  modeling.

There is still a lot of room for growth in the field. Understanding the content of a large text corpus can be assisted by topic modeling methods, but the discovered topics often do not make clear sense to human analysts. Interactive topic modeling addresses such problems by allowing a human to steer the topic model curation process (generate, interpret, diagnose, and refine). However, human have limited ability to work with the artifacts of computational topic models since they are difficult to interpret and harvest.

Often considered the “magic” of data science, the development of models is always evolving. The power and insights gained from those models are precious and really useful.