![A picture containing text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAeAB4AAD/4S3kRXhpZgAATU0AKgAAAAgABgALAAIAAAAmAAAIYgESAAMAAAABAAEAAAExAAIAAAAmAAAIiAEyAAIAAAAUAAAIrodpAAQAAAABAAAIwuocAAcAAAgMAAAAVgAAEUYc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFdpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQAV2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NAAyMDIxOjExOjA3IDE1OjM3OjA2AAAGkAMAAgAAABQAABEckAQAAgAAABQAABEwkpEAAgAAAAMwMAAAkpIAAgAAAAMwMAAAoAEAAwAAAAEAAQAA6hwABwAACAwAAAkQAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMToxMTowNSAwNzowNzowNAAyMDIxOjExOjA1IDA3OjA3OjA0AAAAAAYBAwADAAAAAQAGAAABGgAFAAAAAQAAEZQBGwAFAAAAAQAAEZwBKAADAAAAAQACAAACAQAEAAAAAQAAEaQCAgAEAAAAAQAAHDgAAAAAAAAAYAAAAAEAAABgAAAAAf/Y/9sAQwAIBgYHBgUIBwcHCQkICgwUDQwLCwwZEhMPFB0aHx4dGhwcICQuJyAiLCMcHCg3KSwwMTQ0NB8nOT04MjwuMzQy/9sAQwEJCQkMCwwYDQ0YMiEcITIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIy/8AAEQgAcwEAAwEhAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A9/ooAKKACigAooAKKACigAooAKKACigAooAKKACigAooAKKACigAooAKKACigAooAKKACigAooAKKACigAooAKKAEzRSAWkpgFLQAUUAFFABRQAUUAFFAFO+1Ww0yMSX13DbqenmOAW+g7n2FVIfEEd3B51lp+o3CHofs5hz9PN2ZoAJdU1KPDJoNzIuTkLPEGx9C2P1pn/CRCI/6dpepWSk43yQiRfqTEz7R7nFAGnbXtteR+Za3EU6A4LRuGGfwqegAooAKKACigAooAKKAMvxFczWPhrVbu2fZPBZyyRtgHayoSDg8dRXgg+J/jInA1gk/wDXtD/8RXbhKMKkW5I5cRUlFrlD/haHjL/oM/8AktD/APEUn/C0PGX/AEGP/JaH/wCIrs+qUexz+2qdzp/h/wCOvEmt+MbSw1DUvOtpFkLJ5Ea5whI5VQeor2mvPxVONOdonXQk5RuwormNwooAKKACigAryvxJ8U7i61abQfBthd6lcRuI7rULWHzktweCUA4Zh2z8uR3oAyH8WT/8LM0zTdBtJYLwqW1D+0GLzTose/ysgthhufCjgMBxjr3l34TviL9rHWLq3e5Kybo5ShZhK7lc4baCrqmQM/L+FAE39nS3t3qN3pviB3vo42tYgG3xWx2cBlyQzh8MSee3ArPn0rxHa6VaT3XiUWht53e7kLK6JAUIyWYDLKeQSMc8g4FABctpeu6c2taNZ6lcXKKsUeo2AEM8qj+JS5USqD2OVPYGr2jeJZtkSak8c1vI2yHUokKozg7THKnWKQHjB4J44Py0AdUDxS0AFFABRQAUUAFFAGN4s/5E3XP+wfP/AOi2rwfwEbeyv9Q1u7h86HTLNpPLPRnchAPxDNXdhr+ylY5a38RGN4j0tdH1y4tom32xxLbv/fiYbkP5H8wa6XRdHfRta8UadM6TPBok5LheMlEbj6Z/SuyU70/U5ox94h+FZA+INhn+7L/6Lavf7nU7O0DedOqbQMjHrXDjf4vyOrDfAVDr1qb37KksZmCl2iJIkVRjkrjI4IPPaquo+LLbTvs8j21zJbz8CVIyMH6HBPGTxnpXGdJs2t3DdqWifdt4YHgr9R2qxQAUUAFFAHlnxL8ULdalb+D7e5ureGb59Uu7WCSV4ohg+WoQE7myuT2DDP3q47xZ4xbw3Ha2PhvWYtGs4MNbWh0eZC6YI3M0g+dun8PJ5zxQBf8AD934bs7f/hMhqulxzzyyyym4ZgkU+Nplig2+YS2WyAwGCPQY7LS4tP8AFBb+1fEtzqsRcGNIW+zWsgwDhQhy45wQzHp0oA722toLW3SC2hjhhQYSONQqqPQAcCvKPiDcnxR8R9D8EGR00uJDf6ptfaroMkKx9Pl/8eHpQBm6h8Tr/W702vhdn0/RbWX7OtxBbrNcXjgfLHBGRgcdyMKMEkZAPcadpmuXt617ef2ZYSzwBLvT8G4aZOgaUhlXdjIyq+2SBgAFjwprMH9qXnh9LmaZbQt5BmRg6qjbHQs33wrYw/cMB1U119ABRQAUUAFFABRQBjeLP+RO1z/rwn/9FtXgGgXumyeH9R0S7u3sJr2WNxdFN8bBM4R8cqNxzkZrvwqbpu3c5K9udXNvU9Dlj8K2F5rFu80ekyCF5LaQMtzbOSUKycjhsr7BvpWxeeInvPEXimxilt009NImKrEFHmP5SDLN1ZhkjrxjGK0tz69Fcj4fmef+FZVh8Q27szrgMAY4vMIJUgYWvVJtUW3u/L1AXN1bxorLmNfMj3HDfI2eQAvTJGT0zWON/iGuG+E2AZbUi3+wakqRoRFHEQ6yg+kgGc/Ug57gYqil9LBAbyR9WaYvvEU9s+9FUjKorknBG0HnPylgDXGdBc8Iara3WtTSW7zRx3KEhZyQZGGMHBwScZ5IyR+vd0mMKKACs7XNS/snR7q9Cb5I0xFH/wA9JDwiD3ZiAPrQBwGix3fhnx7Lay2jXUbadFLd35lAEcsssrOduCWZ3AVVHZFHauDZtO8XavrvifU4bnUYhdyQ2sHlkqLaPG0KCMqz4IB/vDB+8aAPQLfwf4O0nR49M1DQbfU9Ylg866it7YPOWYksQRjy13EhclemB0rnbjw9qltNLPpmla1bRgGT/S4YmkYgHCt5Rk84YOMSJu5/1gFAGx4Q+I89881jcrC15DEWW1LGOR2GSVCN86kY5Uhhz8rHGDxvibUJtY1jW9Z0+2ks7rU7GHSQJCCxdpBvMar8zr5adQM9sZ4AB3HgTwqvhXTBrt3YXpkWNbe0sxFultbcsNzFB1kY5d8ZIHA6YrmvEFv4k0nx/e61ot7cSXt7FF9g+2xMiXCbJWe327QCy4UruwRgA8nkA7PT7jUrTw7aazemKOWDVn+1RoPlCySGKYdTwJGZ+vRRXoIoAWigAooAKKACigDG8Wf8idrn/XhP/wCi2rwnwP4ct/ENtrcU7Ikq26JbSOeFmd/k/Mrj8a7sNJxpSku6OSslKokalxps2heEb3TLLUJv7WihE+qWQIePypOCAp43INpJH97r6UbDwfpImsNO1G8vJtXvQri2sY1ItVYAhpC3sckDoPzrdVWk2luZuF2rmP4ciSPxOsRu9ix+aEmjGdxCttxkdz/OvXfB/mTyzT4kaZSvzuCd2OCM9Qfr61z43416G2G+E7Brm7itPN8mSTA6ZAc/gVAqlef2j/Zz3FwYtyjeqxtwuOeSQPp0rjOkp+G/Dcmm6pNPcRhgqKsMpIyexHXsAPT8ea62kAUUAFcp4ovbOPWNMiu3KwWKzatcEdAkSbRn/gUgI/3KAOGtvE17f6Br/inUIbfSY9WSKGwiu3BZoI92W2nrnfnpjnrjBryvwXaX2iXT6sbiWHToIoZJZJIWCK5xIibTy7btjhVOGGCSozgA9f8ACvjzwxoXgm01vVb4w3mrzStLLKDNNK6sV3PtHCgAYAACggD388f4+eJLPxBO0T2uoaWJSI0ktvKZ489RgkqSPXP0oA9W8PfEvwP4ytoTdSWdteLhmttQCgq/+yzcN3wRz7CtTVvE3hTwnot/qNm+ltMitL9ntZIleaQ8dupJxk+3egDzif4geIdVlsLLxT4cisILq/SBRcWk8QAY4BSUOPmAznge3pUknw6n8YXuvQ2Oqahpy2TwQKs1ybqIzorF1DMd2F3Lg5BG9gQOQAD06Lw5cp4Cn0K7vTd3ctvMr3KoIi8jlm3ADp8zfpWzoty95odhdS/6ya2jkb6lQT/OgC9RQAUUAFFABRQBjeLP+RO1z/rwn/8ARbV4DZyyaf8ADy6uYXZJbnVIYwynBHlozjH4kV34XWDXmjkr/FfyH6JqWq3niO+8QmCGZY0aS+QjZHKj/KU/3mzwO55qoviLXronS7SeVROVgWJFXzXH3VRnChm4wOa6+SHNr0OfmkkQaAklr4kjikUpKjPGyscFSAQRXoOm3usaFM1+2jia3kHySvNsU8j5gMH6YA9/euLG/GvQ6sN8Jcs9Z8Q3us2tosUVstyDLEI7kyKeoGQR8o4OOBjGcVJIviG41QRzX9uWDHaJImkQDAJYkkBSPpgciuM6D1C3BWCME5IUA857evepaQwooAQ9K8u1f7Z4j1/XtEjYRTahFPaRO65VbeGIDJ7jM855HUJjtyAcv4f8UTamWhvNAmnvrGXyb60e0jms2lU7d0TMw8p/l5C5BxnHeoviV4ruYPEtkmkXl7p8mo2xS+gSKSBvMRWETbiqswy55HB2DPagDxybQtVbQ/7cvMR20ku2Hz3w9wxPzGNerAdz059aoQ6be3GoQ2EVrM15MypHDsO5i2NoA98igC5rHhnXPD9x5Gq6XdWshG4eZGcMPUHofwqjZ2Vxf31vZ20e6e4lWGMEgAsxwBk8Dk0AdrZeHfE93qVrrmq3Ye2sZLeR7y4n+0LHGbho1bAbLJvRzwQMDOeQa+kPhxavZeFmtbh999Fe3Qu5Cu0ySmZiW/EFSPYigDrHYIhZjgAZJrG8Hv5ngrQnwRu063PJ/wCma0AbdFABRQAUUAFFAGN4s/5E7XP+vCf/ANFtXgHgtzf+INO0i6AmsGlllMDqCu/ym5x+A/Ku/Cfw5Psclf40b8+l3Hh3SfD1hHsJuNRjk1JkOSkwKtHE3phWzjucmtrXbtrbxhpWmXjRXOoTaylwHMa7raDzP3cYYDOSOTknAwKr42mvMle6rHBr5Y8f3fmkBft03Xofnbiu60PUYLKWSK+LTWzfdt1wy7sDHByDz0IOayxfxL0NcP8ACyB7+50TX4dZm0jZaQlBsgAcRxYK/MVJw2c9R7Vpa9rSYkihSRbG4m8796GRgO7YPIU4B5HrjrXIbnpmnyTy2FvJcxiOdo1MiA5CtjmrVIYUUAIa8G8SeIr3w/8AETxJb21rciaLTJTDcQxl/KErxu0vHQLluvdRQBm67B4cuvAUs72WoPqM06W9tJLZTLHaoJgvlq23aGwG3Hqzluua1PiHpug6ZpiDSZfs1o8MsqW7hl+zXEa70lUPyu7HlEcA7174oAwIbGfQhN4yOnSX+p2FraMLC+kMqWQl3bXJwpIWNY8D+Euc/d49B+Gfh6y1HWdR8Xav5c/iaSc+aikNFbKw+QxHJ3Bkxh8njIHQ5APVCisuGUEehFcV8RLa3TS9IYW8fy6xakYAHO4gfzoA8l0+2mvbjw3LBMq2TaXBpGpwEqGaKXByFJBbHnocjoQD7H0z4datDPeNZ2d7Le28mm21y0ssJjbeuYdxGT99YkOM/wAOe9AHQeP71rD4f69cI5WQWUioQcHcw2jHvkitLw5YPpXhrS9PkxvtbOKBseqoAf5UAadFABRQAUUAFFAGN4s/5E3XP+wfP/6LavAvCOmeIoNQtde0jSmuxAz7CSNpO0qc8g9678JKKpS5mcldPnVi59m8U6RM1xrNs8NleX8M1zLMykeYH3Bgc5B+9+FNlim1LxnruvW18kdvp073YuiPMUkN+6UDvuIAHsK6FyfFHaxjrszD0m4uLrxMlyWxcTSvIzg7dpbJLDsOv0/Cu40q2u7phFbwiQ/vE+1q3mOrjaM7Sdvtj0b6Vy4xWmvQ6MPrEvweHfEEpmElyJbclozLLEV2kg4IAGSOfUjk+tU/+EduoIjd3E0kmoyzFZbcL5jeXyTgHkDGTx0ArjOg9F8Oa1BJb3huNU84wnc7uyeWoxuyrDqMHPJ4rpo5EkQOjqynoVOQaQx1FABXlfxo0OYaXb+LNOjD3ulZSdG+5NbPw6OO45556FqAODg8TPrehW1pYXt3cwxXkNyYY4gTDtffiZWUAsSp5WUBj821STUHjy48S+KSIlRVtH2RyyT3kLSkbgdoijPyrnDYAZjtBJOBgAsW8F1pN1p17pfjOw1TSYLM2tx9qhlb90cmSKZVDMAASV3Yx0HTnb8LapaeFvEosrTVtPutMjTfZXf22LdNaOxP2cqWBLo2WU9eoIAfgA9kg1zS54o5ItQtWWVBIn71clT0OM1xfxQ1qKKy0OytIXvr6fU4ZYra2KtIyxnexAPsMdutAHj8Fnq1oL5zoF7522z09pygDwTx2wCxkZ4DS+QQ3TAHevW/hLY/Z7TVbm9he31YzR20ttKMSQQRRqsKke65bI4OfagCn421Z/FvjnSvAelyI9vHKt5q7jkLGhDCM/XAz7lfevVBQAtFABRQAUUAFFAGN4s/5E7XP+wfP/6LavA/An/IR1XB/wCYTdf+gV3YZfuZHJW/iIi0PQ7KXRJta1ZrlrUTi1t7e2IEk8pGcAnIAA9q39JtI7fW9a8E3Sefo+95pLkEK9vsXIkLAYOOAQeMnt36ZybulstvkZRVrPucfojxxa3E2WaNS2DjBIwa6wIsUpu7SWeCTJKNHnp/9euXG/GvQ3w3wk0eqeIRYhZr9TYt8mJslsHnAzyfxNGm3U8Gs288d5O8mQMu5c4JyBj39K5DoNTSlEHiPXrqNyYba5eQQjHlyKykbSO4Y7Vx7n0rv9N0C20jUmXR7mSCNRmS0dt8ZB54zyCO3pnFJgdBFcJJI8YyHQ8g1NSGFRXNtDeWsttcRLLDKhSRGGQykYIP4UAfJ994fj8F+MtQ8PavMlrBKfMsLyW1jmjIJ+UvvQkKR8pK/dIPDCt671HwRo8H2TVoLx5JkyRp72txbyrnqGQJ37FQeOlAEelz6d4ltWttL1LxVem1UYt7hLS4cJ0+WN23MAPTOKdYaboepapLYizukkiO+ZbzRo0ZUBw3yxRbs5IGdwAzk+hAL+naLpk0csdhYae/mbTMdPRrnjnJ/wBeyrgkfeAGOep2jJGkRrCL/TbjbNahWM9nLDbNEWOMhxBlFA/ikKZ5AzQBv6D4c1DV3uLD7BdahCQjz3V1euyS7dhQON6EkYXG5AcAEZBBqn421VtB1lNOi0u1vfElwFiQsJJnQNwoybhjn5gQpXHNAHpPwq+HcXgvRRdXcedbvEBuXbB8odfLUjsO57kewr0SgAooAKKACigAooAxvFn/ACJuuf8AYPn/APRbV86eGdWt9Hu72W5EhWexmt12AH5nXAzz0r0MJHmpyRx4h2mmN0vxJd6XZC1jhtpRHN59u8yFjBIRjcnOM8DqCMgGtLw3qtjLaaxp2p3ctrdasFX+0G+dV+bcVcdQGPU11TpWTcTCM9bMg0jQriLxiukyPE0ybsNHICjjZuBVvQgjH1r0LTrCY28towkXZuIXZz71w4x3mn5HVh9I2MpbR5b4RLaPcbTkRHkMx4HH4itbSPBz6Ikuta4scNvCGkMQfOf7uR079M1yHQQ6BZPJqOnaYwKT3Ug1C+PQxoAfJj69e/4132m3IvteviFXbA+yORcZIwAQfbcp/KgCvBdq3ieG2s3IXfI0ylc/KqAf+hbfyrqB0pDCigDlvHPgXS/HOjfYr8GOeLLW1yg+aJsfqp4yO/scGvlXxh4B17wXetFqVqzWuT5V3ECYpBn17H2PNAD/AAJ4lPhjUrq7ge1gvmhC21zcw+YkbbgWBwCRuXcuRzz6EkewjxhceL/D8dlrmm2z6p9pVtPutOcTwo4GQ0hRiY1J+Q88Bs8YzQBjyX+jPfLdXcWniYqyeZ5uyZA2X3Do27nPB4ISMEZc1R1bxD4eSRkfXobtEfKpdQG6khbk/JMAJSMlMMJOiv3wCAanhTXvHHiPQ4dE8JWbWNmJZGuNZukIJDux+XcWyQD1yzcdRXo3gn4X6P4Rla/keTUdZkyZL655OT12g/dz68k+tAHd9BRQAUUAFFABRQAUUAUtWsf7T0e+0/zPL+1W7w78Z27lIzjv1ry3/hSC/wDQeP8A4C//AGVdNDE+yTVjCrR53cP+FIL/ANB4/wDgL/8AZUf8KPX/AKDx/wDAX/7Kt/r77GX1XzNTQPhQ+gazBqUWsLK0WRse14YEEEH5vQ12VvogtrozxTbWLZ4Tt3H04rlrVvaS5jenT5FYm0zSxpzXDGQSGaQvnZjb7den+JqvrugLrrWqTTbbeGTzHjC58zHQHnGM4zx04rG5qV9I8LnTJbm6e9NxfXUm+ad0PPGMKufl/D6VNp3hqHStv2Sd0KhgCct1JJzknPJouItWOiWlheS3US/vpF2se3XJ/Pj8q06BhRQAUyWKOaJo5Y1eNhhlYZBHuKAOH1f4PeCNYEjNoyWsr/8ALSzcxY+ij5f0rir/APZu0yR86f4guoE/uzwLL+oK0AWLP9nHQYx/pmsajOf+mYSMfqGrsdG+EvgrRCrw6JDcSqQfMuyZjkd8NwPwFAHbKoVQoAAAwAO1LQAUUAFFABRQAUUAFFAFDWbqSw0W/vIgpkt7aSVAw4yqkjP5VmyX+paZd2a30sFzbXj+SrxRGNo5NpYZG45BwR2wcdauMU0RJtMpaZ4iuJ9Dk1Ga9hmdLH7S0EdqybW2g43EnPPFSXXiaeHwul0kSPqpZoTbjn96gJkH0AViPXj1quRXJ59C2NRvdU1Oe202aGC3tQgmmkjLszsoYKoyBgKQSTnrjFUNQ8SXmiLPDqLW+6F7eT7SqEI0DyhGJXJIZee5HQ+1JRTfL1G5O1yW+1u/t9Fk1aUwWVs80KwidcmONpFVnk5AHDZx27n0LTW766FrGktvItxdyQR3SxEJKghLh1Unswx1wdpx1p8isLmZHBreqR29zJNLbTy/bmsLaIRGMNJuADMdx4AySMdquXdxrOkW3264uLa8t48G5jjgMbKvdlJY9OuD1x1FHLG9hpsjt9WvJNektLm6t7M+eywWssJ3XEQH3kfcAT34BxjBHeukHQVnJWKi7i0UigooAKKACigAooAKKACigAooAKKACigCnqdn/aGl3dlv2faIXi3Yzt3AjP61npo1zPdwXOp3qXH2Y7oIoYfLRXwV3kFmJOCQOcDPSqUrIhxbZXi0DUBpEGlT6jbtawpCimO2ZXKoynBJcjkKQeO/4VdTRIl1y41EuSJYtnk44VjgM/1Kqg/4D703PsHL3KVn4eutMihOn6iiTrCkM3nQb0mCDCsQGBDAcZB5xzTn8NtcB5ry8869kmgd5RHtUJFIHEarngZz3J5yc0c/XqLl6D5PDo8t7WG42WLTRTrblMiNkkDkKc8KcY29s8ccU+20E20lmq3TNb2dw0sEbLkqpRl2Zz0BY49Bgds0e00sHLrcUeH42sby2edwZ7trtJUADROWDKRnPIIH19MVHJo+o3yxwanqUU1ojBmjgtzE02DkBzuPGRyABn6cUKaG4sfcaRe3dzGtxqCPZx3K3Cp9nAlyrblXfnGAQP4c44z1rbHSpck9hxVhaKRQUUAFFABRQAUUAFFABRQAUUAFFABRQAUUAFFABRQAUUAFFABRQB//2f/hMeRodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvIj48eG1wOkNyZWF0b3JUb29sPldpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQ8L3htcDpDcmVhdG9yVG9vbD48eG1wOkNyZWF0ZURhdGU+MjAyMS0xMS0wNVQwNzowNzowNDwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMAAwICAwICAwMDAwQDAwQFCAUFBAQFCgcHBggMCgwMCwoLCw0OEhANDhEOCwsQFhARExQVFRUMDxcYFhQYEhQVFP/bAEMBAwQEBQQFCQUFCRQNCw0UFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFBQUFP/AABEIALUBkgMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/AP1TooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAopM0ZoAWiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKTIoAWik3exo3D1oAWiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACmU+mY70ncApa86+PXxW/4Ul8Kdc8af2X/bP9mmH/QTceR5nmTxxff2tjHmZ+6c4x3zXyN/w9WP/RMP/K//APctduHwWIxMeajG6RyVcVSovlm7H3/RX5//APD1c/8ARL//ACv/AP3NR/w9XP8A0S//AMr/AP8Ac1dX9k43/n3+X+Zh/aGG/mP0Ax7Um30r4A/4erH/AKJf/wCV/wD+5qP+Hqzf9EvH/hQf/c1H9k43/n3+Qf2hh/5j7/8Ael6V8T/C/wD4KPH4kfEPw94WPw+/s/8Ate9jtBdf215vlb2xu2fZ13Y9Mj619rj5hXBXw9XDS5aqszrpVoVleDHUUUVgbhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUV+ev7WX/BWDw18MLzWfCfwzs08VeKLZjbvrVxzpdtKCQ4XBDTsuCOMJkj5mAIoA+1Pih8YPB/wY8OS654z1+00KxRSU+0PmWcjHyQxDLyvyPlQE815lY/Fz4r/FjR7TVPhx4E0nRtB1CNJ7PxB441QqZoWGRItjah35H8MksTdiF7fNHwK/as+Efg34UweMtX1a48ZfE9bi1fxV4ml0wvLbSXzkELcSqqJaRNiLbCdo8sYQ555L/gnF8bPiT48+MXivxvrt1ZnwV401v+yJ7H7S2621JbaW5haGPDNjyomjZmI35UkkpwAfVHw78XS/F3W5NAn/AGh7PUdehWaWfSPAunW9jhY3CON1wLiUhGIBKspyea7bw/8AD34e61qF74ebxpqvi/W9NlE17Z3XjC5uLm2bOB5kMcyiMZ/hKAe1QaB+zqugz+D7T+1pb3S9G03XbGeTe1vcSHUZ4pQUKfd2hZF3BgR8pHPTmfhR+yre/Cv4J+J/hv4e8RXnhdbu+nitPEFtMbu8NjI27zFDhVguCrtGWXIDIJQAWwADa0X4L/B/4nz6pqnhvUtQurvT72TTLvUNA8WajFJDcxEF4XaK4HzLlcg54Iqxcfsz32m3hvPDPxf+JGg3IfesV1rK6tbZ9DFexy5XnoGFZnib9k+Dw78L/E/hz4PaxJ8NdR1TQodJhmshtTzoCBDcu6jzFlMfmRPKp3MJAxyyKa5j4U/sp63b+H/E1h4l/s3wLZalBbiy0vwPql7M1lexNuTUftVwQ3nhguAiqpXKyeb2APSNP1j4veG9F+0Nb+F/inarHuhutInbR7u4HbbHIZoGYjv5sa59Kl8FftSeAfGXigeFLjULjwp4z3bG8M+KLdtPvi392MP8k/rmF3BHIJFeZfs0/C6b4B/DjTfF/wAYvGtxFq2m2kumQLrl/FZ6ZpFmJpNgSIMI/NlQI7yOXfkICAuD1Hxj8XfC34vfC2yvNc8G6j8UfAWouyJf6HpMmoG2kwNskax4uFzyBNCpAIwWXPIB9DUV8dfDjx14s+E/g3TfFPhTWdS+OnwSuTkeYpfxL4diBKupGN16kTBleNgs8fT5gpr6h8D+PNA+JfhWw8R+FdXttc0O/j8y3vrN9yOM4IPdWByGUgMpBBAIxQB0lFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABTKfTKTA+f/ANvT/k1Hxv8AWx/9LrevyHr9eP29P+TUfG31sf8A0ugr8ltB0O48Ta5pujWilrrUbmKziXvvkcIP1avvMgly4Wb8/wBEfK5or14o3vGfwt8ReA/D/hXWtYs1g07xNZm+06VX3b4wRkNx8rYZWxzwwP05Kv0f/aW07Rfiv4T8Z/CfRbVR4i+GmmWGr6XsOXnjWHbNEBjjERUYHUunpX5wL82MHIPINevgMW8VBuWjX5dDzsRRVGSUdUwrpvFnw08S+B9I0DVdb0qSw07X7b7Xpty0iOtxFhTuG1iRgOuQ2D8wrY+IXwf1H4c+DfAuv399b3A8WWMmoW9vbhswRL5e3ex4LES9AOMdTXtn7XQ/4sP+zf8A9i7J/wCibStJ4r95TVN3jJ2+4UaPuycuh5N+y7/ycP8ADv8A7DVv/wChiv2oWvxX/Zd/5OG+Hn/Ybtv/AEOv2nVgy5zke1fI8Qf7xH0Pfyn+Ex9FYuseLtF8OyRR6nqtlYSTNtjjubhI2dsZwAxHas2fxg7JZzWv2NYbub7Pb/brkwtNJhjtTarAkhTgdeOlfLnunWUVzlr4ytZLFLm8kt7CORcxzSXkRhkOcYVw3PPsK8vs/wBrrwM3ii80TUJbjSZbWeSBrm4T9yShIZgepTI++oK8g5waAPc6Kp2N9DqVtHcW0glhcbkdTkMCMg/Qggj2INXKACiiigAooooAKKKKACiiigApCaWvlP8Abx/aKv8A4U+Abnwl4Rumh8c65p13dm6iVmOj6ZDGzXN+23lSAPLjyRmRhg/LigDyL9of4+ePP2pPjrc/s7fBLU10rRLZNnjDxla5ZreMNtniiYEYVchDtIaRyUBVQxPGzS/sgfsR2Y0+K30nx746tXjhmv8AUI11e4MmQJHWJSYoQoYkLlGONuT96rn7H/gf40fCH4LWGl6J+z74Z1+x8W2K3Oqa3feIktbi+W4jLR/aUdCwjSNwrRqDyWx8zMa8H/bI+KB+DPii/wDh9qv7O3wf0S0vI0urd9Oiae58gStszcW7wujb0OQVQkcEYNAHrn7XnxWn/a2+F/hKb4GXd14q8J6fqf2LxH8P7Gxa0urt0AuISYlHmNFshmwFyBjPLDA9W/Yn8A+Hf2Y/Dfjr4i+IdbTwV8O/FVzBf6LpfiVkspNOIMyvDIsnziZM+WoU/MmDyScfEn7IP7VPg34f/F7wdeeK/h34L8LaBHcXMlx4ptNOvGubZ/Kba8J8yTBBKIyhWBDDgHJPv/jX9u79nzSfiYlz4O+F+pfGTxHq16DNrmv77iZN0vEdnHcrI4AH3I41iX7o9cAH1XH+3BH8Rrq5sfgt8OPFHxTnjVgmsLAul6LvBwA13c7eOp+VSSBxmtvwr8K/i38TpItS+L3jGLQdM37l8FeAZZbSA4IKm51DIuJM87o4yiHjJYZFcb8I/wBsGz8beIdVfRBHdaLbqssvh0x/Zr/RI1QKUmt3VHjxtLF182H5uXhHLfTnhXxppXjSxNxpdyJCoTzoHG2aAsMgOh5XI5B6MMFSQQaANPSdJtND063sLC3jtLO3QRxQxrhUUdhXH/Gz4taN8Cfhb4i8deIHk/szR7fznjiwXmcsEjiXPG53ZVGeAWyeBXfV+Z//AAWk+LFzpPgvwJ8PLOaNY9XuZtWv1Vjv2QAJCpH9xnkc/WIelAFb9kvwb4n/AOCgvxSvvjX8Yd1z4E8P3xh8NeE92dO+0LgtmNh+8SMbNzEfvHOCdqFK+u/j1+2r8I/2ab2PSvFviHGteWJF0bS4GuLpEIG0uq/LECCMbyuc8cV8qftFfH4fsH/shfDz4TeDna2+IGraGjNdL8p09XG65usj/lo0ryKg7YLH7oDeC/BP4f8Ai3w7420q7Ojf8LO/ac8R2kN/aWviI/aLTwfYbUSLUNRLHm5MZjaONsmJShILsqEA+89YvINF8O2vx68Ayw/Du81yEX+teD/HMsekWmupkLmbe221vMY2XIyG3KJAykFTRPFVh4i02L4n/Ac2U+v3rjU/E3w8+226PqqthJWdFdlgvV25WcHbLja5cMjLyuh/s0/Cn9nHRofiP+0V4ntfHnjXUbyKC58ReLA1zaRXUvCxWtuwKqo2/fK5CoW/dqMD6N8eeFNJ8P8AgLxB4h8LaHoNt4jsNKubrSb7+zomEc6wl42yoBKllQkAjIFAG/8ADH4laH8XPBWneKvD00k2m3qthZ0Mc0MisUkilQ8pIjqysp6FTXXV8X/so/EjxPqXxUt9X1jwNL4I0D4naHFrwWG4in0+81pIo3e4tWRiy/aLJ43dZFU77Z+WIZj9oUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFMp9MpMD5/wD28/8Ak1Hxv9bH/wBLrevgL9h3wZ/wmX7SHhp5IzJa6OJtXmbsvlJiMn/to8f5V9+/t6f8mpeN/rY/+l1vX5WfD34k+JfhX4jj1zwrq0+jaki7DJDgrKmQSkiEFXQkD5SOw719rlFOdXAVYQ3b/RHzOYSUMTGUtj1Hwj+0FJ4d/ayuviTM7Lp19rVwl9G3exlcxspH+xGEbB7xiqH7RnwQvfAHx/1DwroVjLf2urzLe6HDZoXM0E5LLHHj721t6fRAa9Bb4pfCT9pb/R/idpUfw68byjaPGOip/olw3rcxHpnjO7P++or1j47fC7xZoP7N/gvxlbazaah4r+HbGO18R6LKJVu9MbEaTLkHDIpjJHONshBOc10e2dCtBcvK2uXy8ncw9n7Sm9brcb8Z/hr4C8LfCv4Nn4x6zfaVceH9B+yf8ItpKrJeahNiDegkUkKiFQCwIHzffHfgP25NU0zWvhZ8Br3RNL/sbR59IuJLTTjJv+zQlLbZGW7kDAzXl/7Qnxe074keC/hNpltqFzqmraDoZh1a7udzbrmTyyy725dhsO5umTwTzjV/aO+Inhzxh8HfgbpOjavb6jqOhaLJbalbQ53W0hjtwFbIHOUbpn7pqsPhqtOpSnO7fM/TqKrWhKM4x8v0PLfg1qM+k/Fjwje2kz21zBqUMqTRxLKyEHOQjEBvoSB71+kOk/tE6Br2iWlpr0FtfW+GylzG0blGbyyyKi+XsIJwwdsc5IIr80PhveXOn+PvD9zZRRz3UV4jRxTbNjnng7wVwRnqCPav0A1q68Vah8Hbi38SR6fEusW0lvY2lnLCq2sZXP74ogEZIwPvEgk9COPPz/WrF+R35X8EjftNJ8Vazax3llf61JqskOYPDen2yjT44d37kTSzK6szR7XzJksWBz0rR1rQYJm0DUdW07xdqnihb61ubu20GR0soJ7YjYREQIyhxtaSJdu7JyK4b4c638WbjxToVxo0+ua94c1CP7Bq1pqFqLe5tkO9PNWcOFYxMdyyKVLKNvoR6vdfCL4i+H9amaz1tfGuiS7WitvEMym5tSR8y+YyNvXPQn5gOMnqfk/U9wyPiB4g0zwf4ik12X4a+GvE/i++cDTrVL6KDUJ94yI2t5EYiVQCpZchiOozgN1JPDPjXxF4P1HxVZanqaeLhDc6Nppcpa2KxxqVt3iIHlsC7ZkU/OSRwuFq1ffDf432viK0uNK1fwze6QpjuILfXlNzLpMu394sD+TuZc5CnIOMDOADWH48h+JrXmrt4Y8OWOia5IGuJLTUJIpI9RtI15YTK/7iVpd7bVwMYzk5NMCzpviXXvAnxhGryaHHFo1wg0vULC1QwjT55GBgBkZ8TsyxjEhULlgilSSK+q6/PLTfH3iu51KzuvFrWOmuTaz2unxq86zKdksKTMwCyD5mZR6gYLbiK+9vDGuxeJfD2narbwTW0N5Asyw3CbJIwRnay9iOmKTKRr0UUVIwooooAKKKKACiiigCtdXMVnBLcTSLHDGpaSRyAqqBkknsAM1+aPxt+0a1+zN49+Nvi95bdfihrOk6cv2cMzaP4VjvQYUQYyzSohkcDG7zl4BBFfWX7XeuXuqaV4K+F2l3M1le/EfW10W6uLU4mi0tEafUGQ9iYUMeewlJ4IFZH7ZGi+H7P4Q+APAD6TbvoOueMvDvh6LR41VIzbreRyGFR/CoigYcdqAN7wf+1n4P8bfs/wDi34neFrDVB4a8N2NzPG+o6c9qlz5EJfEWfvqCuwsvAII7V+aH7Nvwl0z4leHPFHxn8brH4o8Q+KL3U/8AiVS2ZjSJY2SW9nUkbWeZp4bKLYMRvegj5lGPpz/grJNF4Z+D4tLXV7NLe5gt7ODw3G1xBJaRicE3Ma27rG0ZCiMrcoyg48tlbKt8h/ssftUaT4dsdL8O6hYJp1n4b0pZ7C1WaS4n1vUo7mWW2to1wFj8y8uoLhyeMWEQzhaAPuj9m/4GaP8AEr4w+LNd8TaXp+taF4GMnhuysZIkl0+XWpkWXWrqOHYEUCR1t1XDALHjjaAPbP2gfhf8Btc8M2th8TYfCugWtrH/AMS69vLuHSrizC8qbeYMjJtIBwpxwMg14V4X8deIPhf8N/BP7OfwZjttW+MY02O48SavMwuLPw3LLiW7u7uT5hJKZZX2R/MT8uQflVvobwr+y98M/BemyXetaHYeL9cZhcah4o8XQRX9/cygD9488ynaBj5VXai9ABQB8PeOvDugXWpWCab8WfCvx60yzGzS7iLxTZaX4/0fB+VrPUQwF1syzeXN97IAHSp/A37QnjL4X6xLp/iDRtX8V2Wms0sl7Dp6aP430OFmDtJc2B3R3ltzkyIHiblmIPA+2v7Q+AWuarHpS3Pw5v8AUpt0S2Kvp8sr/wALJs5J+9gj3rzH4nf8E3fg/wDEjUrfXtBj1TwDr8brPa6v4U1B4vL5JHlxsWjReSR5YTHagDq/AP7WWi6n8J7fxrqckmtaHOyxWGraHYzF9QmeURxW5tGHmQ3DMwXb88RPIl7D43/b+8Z/D/8Aab1j4E6loPiKa8uo9bm0zUfDK6e76jaqz25uBNDgGKSIqFZHIB3ZXO019HeFf2Q/id4DvLvRX+I2l/Ev4d6xFHb6t4d8aaSVZ0D5cxyQkrvYE/O6k5VfQMMT4XfsR/ETwP8AGa68Xr4w8OaXPZ6fc6dp2vWemzXep3kEzp5cV6JpAkjW0cQRJTudww3ltooA+K/H/iY/FL9qr4l/F7xPbW19p/hfVX0Lwj4fMTXKa3q0LGHT7NIlIMkYKi4lx8vKqf8AWrn9Df2S/gRafss+A77xL8RNct5fiR411CK58Ra1fTptN5PKRFao+APvyY9GkY442gb/AMHf2H/ht8INd0/xGYr7xV4o08yPaaxr04kNo0jM8hggRUhhyzMcqm7k811Xx+TXtd8IzaLpvwz0z4q6DqUMkOpaVea1HYsQCpQKJI2RuQTu3oVZVI9QAfHv/BVb4R+KfEx8Ea1e+LJrvwBdeJLHSpNAhsYllsJJVZDcRTZ+feN4KvgBinauO+Ff7SHxY/Z6+N3hb4E33hi3m+GGpazdWGg3WuS+dM2iyXJEciXcbMkghiDcfNw204wuNH4gftHeFPgL8O9E8L+Kf2ZfG2mWcPieC6Sy8T6rNe2by25DloLl5HM7IuNkePKbuSAc+F+Cf2wPCfhTT/iH8OYYrTU/DQh8SXfgnxhd24trvR5Lyym2xJGsY2F3cxkrgAtgDGKAPtfQf7Z0n/gnt8LPGenwTXOpeBbTTvE9vbxnDXFjbMwlU57vYPNx6nGa+zND1iz8RaLYatp063On31vHdW08ZyskTqGRgfQqQfxrkvCvg3SNU+COk+FBJDfaBP4fh0vfaHEc1s1qsWUOPulDkcdCK89/Yd1hrr9m/wAN6HdSu2r+E3uPC2pQyjDwXFlM0BQ8dNixkezDPOaAPoCiiigAooooAKKKKACiiigAooooAKKKKACmU+mUmB8//t6f8mo+NvrY/wDpdb1+XPwY8NReMfi74K0S4iWe2v8AWbWGaJxlXjMqlwR6FQ2a/Ub9vT/k1Hxt9bH/ANLrevz9/Yf0X+3P2n/BisMx2j3F43t5dvJg/wDfRWvtcom6eArSTs1f8j5nHrmxUIvY6r9pn9lXUfD37Sen+GfB2nrHpni9xPpMcaYhtjnFwnA+VIuZOOiMPSuu/aH8G6h+zb4BiHwr8WXc/gu+Sbwx4ms/O+0wrfhcSOUfcIXkG5TsxtIA713Xw/8A2qJfEHw8+MBa60xfGvhe41S98OXurOilbSeZ8JGzfxoRtC5+bMS9K8S/Y/8AEdn47m8X/B/xTds+l+OLd5rS5nbc0OpIN6y5P8bBd3u0QHeqjLEySlW1VO1/Pz+4iXsk2oPWRxHwD/Zb8VfHtb2+sprXQPDGn5W713UsiFGAyyoBjewXk8hVGMkZArofiH+zB4d0nwT4h8Q+A/ifpnj8+GlR9Zs7eERvBE7bRJGwdlcAg59gcHIwetvtS0vW/g54b+D2u/EWy+F9z4Vvr208Tabf2czrfyictHKjx/LIuCx2MRyQecKa534m/FT4deAfhNffDH4TNeaumsSxP4g8VX8Rje+WM5WKNSAQmR6AAZA3Fi1dir4mrWvBu19FbS3e/wDkc7p0qcGpbnkHwc0m41z4teD9PtrmazubrVYIYri3IEkblsBlJBGc+oIr6zms7zTdauLHWtffUru0v3t3v7243l1iIDfLkDAPYcE18ffDlpF8f+H2immt5RfRFZoGKyKQc5Ujofevraa4t/D+s281nbTXyoP3lpaSmCQIpxkyDlFGBkjk5HDE15Wf/wAWPoejlfwM+v8Aw7NPodvFK06rY3NiJYtVsdNnlnjkboNpDKQFx0XucgV1DeNvs9jIQmsziEI0l2+jSLuTgMQhCk+pwOPSuT+G+ojXfh9A62kcatbuIVk1C6fzNmCxDkAquc/Nmlm+NmieD9LvBNoGoaS8ckcVquxJRdhycSqwflF5ZmYjAB718oe+i9efFHUdQ15tP8M6RfeJYgymW6tzHb28G4EhGkfJJGOeAayPHmoXvh/R4tVu7eZ7+0m8+WOK5hmmiYkqmBgZT5sEEHripLf4ueDvC8ck8WqR6tcGQkLZ2rkgkLlwZHJwRgZBxXL+IPjHB8R47oaXPomgaRZSbpdU1S8gN0WQqxEcJYYHYsTkEcDNMGebaD8O41+I/h7w54jh/tWXUoZbISRzHdDbWzqiwrGEPCxsP3m8cIxXjGfta3iS3hSNBhEAVR7DiquktDPp9vcxReV50ay7cDcNw3YP51oVIIKKKKQwooooAKKKKACiiqGrapa6Hpd5qV9OttZWkL3E80nCxxopZmJ9AATQB893WsWXjD9svU769kjj0X4VeEi091MQqWt9qTiSRix6bbS1U+wlOccZ+OPgLqHxT/bz/aPtvi14i1d9G+EPgLWxqOn2s2UswYXMkcUaDAeYRkNJM2SAQOAQo9Y+HviLXvEXwruoILaHWPE/x403xR4oulbia0gSzSCwtk5+6FaBNxBHLAZzk+YfsbfFSP4qfDbw74U8G6zb/Dr40+ALF9Ni0DVpZP7E8T2XmbpYrmBicSM5beyASIzbhlTtQAwf2/fHngX4peKYrXwXqFj4+8Qa9qen/wBmafpt5BdpfS7YlAKW53JGFzETMwmZpNsYSNHZ/Lfg3+z9Po3jz4gfEKCzvvAXwt8K3hstQ1u6CXGt6JewywyS2mnKjMGuhNi3ScqVEchY8nFfpD8G7rwX4Y8T2114i+B0fwp+Ic+2zutSsfDyPp8kzHYBDqMCGPbJkY3lDltp56/Mn7aXxq8YfsV/H7Ux4Nlg0rwp8Tms9Y1G5S2V57a5gfybw227KK8sflMzMrfMQRg5oA5f9gn9oKw8RftfTeHYtGn8CeFrvTby8s9Iur2Se71DU1UPJeahcyASXMzRfaGAkPlpklFB+Y+q/Fr/AIK0fB37d4l8MN4RvfHXhxYZLeKdkgktNSmVhlWhlPFuc8SEEtg4TgE/mz+1N448a6l8ePEtl4m8VXviTUvDl9daNaaxcLHHcS2yTSBCWjVchlYnHYMQOOK8VoA1PEmsJr3iDU9SisbXS47y5knSxslKwWys5YRRhiSEUHaASTgDk19Pfsm/8FFPiD+zXNZaPeTSeLvAcYER0K9lw1qm7ObWU5MZGT8pyh9B1HybRQB++nwn/wCClPwH+KkMCDxavhXU5QhbT/EcRtWVmONol5iY59H75r1S8/ao+Denqhn+Kvg2MM5jX/ie2xJYHBGA/rX83GTSUAfpF+2B8Qvip+3D8YvEPgz4K3q+KfAfhezguGt9B1JY470yBQ00m9kErBmKBRkKFJ6kmvG/HOk+If2fbz4dz/E3wK/gLXIdRtZRL4X1eOFNXsreZTMlzFbXGYJ1DjEygMxIyNwLn5t+H/xS8W/CnUL6/wDB/iHUPDd7e2bWNxcadMYpJIGZWKbhyBlFORyCBzVOOfVviJ42Sa+N9rusaxfqJmi/e3V3NLIAQM/ekck49SaAP2N+N83iu6/aM+Cnwc0rXI/FmmXPiK18fQajq0nmajpdjaGQyQO20CWJ/m8uRj5n3kbdgMfXvHX/AAT2+BHxB8cWninUfAlrbX8cvmz2+nO1pa3jdf30MZCtzycY3ZO7dXlv7Fljr/jL9qn47+MfHHhq68N+JNLt9J0LTtKvp0nk02xaFpBEroSh3iOJyV4JYnua+5aAKdjYwaZZQ2ltClvbwxrFFDCoVI1UYVVUcAAAAAeleIfs7adNoHxQ+P2ltMskJ8YxalGhYFl+06ZZyHgdBngfQ9a97r58+DdwP+Grv2iLYT7/APkXZzb8fIzWDqW+hEaj/gPvQB9B0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUyn0ykwPn/8Ab0/5NR8bfWx/9LreviP9gjbpXxC8aeJn4Tw/4UvLsMezEpj9Eavtz9vT/k1Lxt9bH/0ut6/LfwF8Utf+HVj4mstImhS08R6bJpd/HNHu3RMCAVPVWXc2D055Br7LKqcq2AqQju3/AJHzePkoYmMn2OODGZVkkG52G8kj+I8k17J8FfhPd6l4Q8S/FGfX5fCum+D5IpbG9hthNLdagGVooYwWUZ3GPJ5++BjGa6D4l/BHTh8P/gGfCWkn/hJvGlk4uf30jC4nLQBGwxIQDexO0AYBPaug/a21qy+G9j4P+Bnh2QtpvhdIr3WLjbt+26jKA4ZvXAct/wBtQP4BXsVcV7WKo0d+vot/vPNhR5W51Nv8z5++IeveJvEnjHUNV8ZPdHxJduGumv4Ps8rMAFA2bVwAAAABwAKv+EfhP4j8ceEvFXiTSbaGXSvDMC3GpSSTqjxowYgqp5Y4RuB/Wv0i+IHiDXvFX7STeDtQ0fw5qvw00/w/Dq+tz6/p6yizRvODFJCQAzbBgHIAV27V88fC3VtA1z4UftZ33hbT10rw5cWsbadaKu0Rw+XOF4/hzjdjtux2rnp5lKVPlhBK3L6auxvLCLnu5XPk7wTMLfxho0hYoFukJZRkjnqBX14nwZ8X/E68ZPBWo2cF3GES8e4uY0eaLGDtjJ3E4OOw4+8K+QPCMXneKtLj3Kha4Ubm6Drya+rbq5m8P6hp11oJu7eK3miS4dJG3+Z5eRJG4Aba2VJXswOOMV5efa1Yeh6GV/w2Xh/wtHwPp8Giar8UtU0XR1R4kstNSC1ubP8A2JEkIdOV4IyCuSrDNcfrngvxZ4U1Lw/d3HxCk8S3WsWsWo3Fr9pMrJaO7KquZACSwMnAwDzjI5r610vTPDvj74cjXfHN1ouv6lsaL7ZI/l3MMWANkqKQJmU7iA46cc5NfL/jzxJoXi7x1qereGtNn/sjS7WxCRPMBcXlqpYmZlPXdyNnGFC4wMCvlj3D3j4lfs56e3hCOOW71oT31rBLaRafJHukk5L2gXG5gA28Deu7kbuBXD+A/wBn3wLq3iRr2+0JtLh0ON5ZtY+xSWkMEq8IXMrMZpQ4GEx6nOQK+g/FusaB8RvgnoGveHdbexgheKLTJpMtGtycJFHMMZZd21Tj1zzXjfxW+Klh8RNd0SMSXFpLEiXl7p9xhdskewyW6Hnbyp+faSACecUdAPtjTU8rT7aMzNdFYlUzMcl8KPmP16/jVysDwT4osvG3hHSNe051ez1C2S4jKNuHI5XOOcHI/Ct+sywooooAKKKKACiiigAryD9ru8msf2Wfi3NBkSL4V1IBuOAbaQE8+xNev1y3xN8Ix+Pvhz4p8MSrvh1rSrrTnXIGRNC8Z5PT73WgD5O/Zo0601j9sjx5cWoL6P8AD/wRoPhXSmXasUEc0K3Mi4XjdleSMAYI9K+NP2n/AIe/DX4qfGjXvi+dRvvDvw+1bVV03SrXw9Yrcan4v1GEhLybT4gQkcZbGbiQkFzkBmbbXK/Cf9qTxkLP9pBrbw9qf9qeJPC0UM0miWktzFpj2qLbvLK4yYo/IM53k4Vgo96+kf2Vf2gPhV4d8XXGtat4c8XJL4S8PaZoOgWf/CLz3TaTpwtkmmvJPJVxHJdTyyP5nUxhOcMaAPJ9H8W+E/CfxWtfA1z+zv8AFPwv4xurdZbCXQfHN++v+Q0bOZBCdqE7VLFeANpBHFc1+1p4F8RfGLwbdeKdL8eeLPF0fgEvbat4L8f2MNp4j8OW8gRjPNsI+0xMwTMgXIBXqAce7eE/2pPhl40/4KSXvxBl16LSPDGm+E/7LhvNWtZ7WR58gNhDGWUjzGHz7Rtyc8AH0f8AaZ8afC3WvjZ8HviZ4T8W+Fdeu77V4vBniezt9Ut5Fu9Fvw8Lm5jDbtsZZuW4G4Z6DAB8EabpfwXk8XeK/iP8T9fvNeskv4FsPBOj3Aa+1aV7aOV2mnLfurdWbYzg7iQwByMHu/AfwR8b/wDBTj4lXHiC00zRfhl4B8O2kOjWrWNjm2soUy0dpCq7TPKN5ZiSoUMPugqpofCuxjn+D/xq0bxhHo1x8JvBUF/pmkak+j28uoPrNxMy2KwXQUSNhwZG+fAVgG+UjHp/7VM3xi/Z7+Ivw5+Cfwp1O48AeBLnTrez0O+s7+OzTWLuTBurm4uSRtlMr4KlhgbSB84oA+Ofi18EYfD37RusfCzwDc6h4xuLXU10W2kktlhmubtdqSqEDEBRLvAJPQZNfql8L/8Agk18J7D4P6dovjjT7jVPGk1vv1DXNPvZIminYscQjO3agbaNykNtyR0An/4Jo/DHwt4P0fxiNZ0uY/HfStVms/F95rEq3N7G7sWiMMvP7iVPm3AkuwcksAuPuegD8ovGH/BEnUI5p5PDHxRtpYiSYbfWNKaNlHYNJHIwJ9wg+lcbZ/8ABFf4pNcILrxx4Phtz954Wu5GHphTCoP5iv2PprdvrQB+GfwQ+F8Gq/DPwR8OdS8KaJdT+OviXc6NqHii4s919YW1ktkzwW82A0Zk3T/Ubhjkkex6Hovg34neH/2p/g74d0S18OfFTTfFd/4m8PPZ2wtzPDZT/uLe38vkSRqsihFAH7/cM/ORjfCS7lk+J/7PtsQrJB8W/FSHn5kObNsEZ/2ien41UPwZ8Raf8ZPhv+0T4XtbiHStU1s+INTVJxBcut34he2t444yGYia3uIjyMOgl54xQB9Ufs5/Gq18b/Er4T/E1T5P/Cz/AA5P4Y1+NVwseuaYfNhZz2LxG8CjuNntX3PX5meN/Enwa+Gvwf8AjZ/wgEWv6VqvgL4g2+t2z3m2W2HiAXGyGCzRXAMDLHMjg4YRsxO7Civ0m0y4e60+3mliMEkkau8THdsJAJXPfGcfhQBcb7pr4/8A2R/Gtn46/at/ar1Gy/exxazpNgLjgg/ZraW3YA56b4nI7c+9fXF9dR2VnNcSnEcKNI30UZP8q+Jv+CU3ge8tfg/4t+I2oq63nj/xBcalGZBy1vG7orH3MjT/AIYPegD7iooooAKKKKACiiigAooooAKKKKACiiigAplPplJgfP8A+3pn/hlHxt9bH/0ut6/IlfvD61+u37en/JqPjb62P/pdb1+W/gX4QeNfiZb3lx4U8NX+vQ2jrHcSWaqwiZhkA5I5I5r7vIZRhhZubsr/AOR8tmacqyUV0PvHTNd0L4T/ALKvwy+Kuo7bnXdB8MNp3h+zk+615diMBvchYzn0TzK8F/aIaP47fCTwb8brGJf7ZtzHoPiuKBMBJ0I8ucgdFYnA9pYx2rlNc+Bn7Q3ifw5ouhan4V8SXui6MhTTrGYw+XbgjGFG4dhjnPFcF4z+D/xC+FOk29x4n0DU/D+l31wIVNxIFimkALbSqucnCk8jtVUcPSjJ1I1Vztu1u3YyqVpNcjjaKsfY/wDwUO+NUPhjR4Ph9ocQt9T8QW0V1rd5Gm13s1ysMJbqdzK2fRVI/jNeP/svnP7M/wC0j3J0iDH/AH7uKy/29PEmleMPjhYXWhalZ65bf2FaQedps63C+YJJ8plSRu5HHXkVz/x7+DGn/Abwj4K02bV9QPj3WLNr7XdLSUfZbeJifLUgAHcDlMEkHY544zdGjTjhqdC9pSaf3ak1KkpVZ1Oi0PI/Ct1NY+KNLuLeWGCaO5QrLcJviTnBZ17qASSPTNfUsmpWjTaZpum6imsT21tbxtd6PFNOZSI8h5XUHgYVQoA+VRheOflbw3JdReItNeyuGtLxbmNorhesbBgQ34da+q49A1Tw34ktn8Py6Xpmp6x++a4+0AxXU6PGwkt0QEK75GAoBP3SDmvOz7+JE9HK/glY3/CtjceILU3eui5h0SYxSw2oUI2o5cBwoYhjGozvKgtyAMZzWv448PfD3xt51zqeiW2k2FrAtlFe+HjBpt0hNyY0U75MPCkW1vNdNpIKbhjjJ8P/AA01z4meCdPg8aRX14LW6nubfW7C4WG5hglPmOHjKkeUSxAPysGIUcVU8N/sv3jyX+p+F7xrKHT5VQyw6cnnBlG4MF/56YkQAKcEseeCR8se3qYnhWbwj8J/D841n4jeIPEGg/24zaXpOleV9muJYCjJNLtkdsFjg7cA7MgnisyPxDf+NtLu/GunxQabcxpIIf3qMEYuEQFR8xP3iMgnkegr0zxn+zrqMnjC01CXXr7W9KmkSa81G8tkihF0gYOoMA2s6sMfMBjnaTziX4p/Dbw94J8dabqmkabNLYQW9vd/bbGb5baELKHuJI1XKIJGj+bjHykj0Vxn254F1Tw7caQmmeHLywnh00fZnt7GRT5DLwVZRypzk8jnOa6qvmD4NSeFfDPxKtdDm8PrL4huLBtQsvEUF4t4stu7rwHViQpJY5OBx6Yr6TjvreW9ltVuInuIlV5IVcF0Vs7SV6gHBwe+DWbLLlFFFABRRRQAUUUUAFFFFAH5K/teaHqv7Cn7UyfEHw5p/m/Cj4hK0WveG4G2Wt7kFby1ZOillkaWNsDBkcDgEHvPgH8arn4L+J7HQtEs9N8U6nqul2Vrokl/eR6Y/i7Q4t40y5truRREL2CKQ201rNt3GJNrBlYN9Yfttfs9x/tJfs++IPDFvAk3iC3X+0dFkfAKXkQJVQxBwHUvGfZ6/GL4A/GnxzoNxb/Cv/hHbLx3oF9fbB4Y1zQf7Zks5C375rSAvG6y4BJVHTcVzkHmgD9APgf8QPFui/to/Hjxpr/wn8XS67e2um6bbaHo9pb3klqvko4Sa7WRbePciRP80mSGB5xz5J+3B+0nbx3uujxRbaF/wnk2l3mg6X4P0WWO+Xw5FdhUu7zUbxVCy3rxqY0giJWIEsTuOWzLXSvCfg231BdQ8P674Xsri4MlzbzaR4t0S2Yhdg3rFc3IyAdvsF2jivPfEnhn9mXU9Ivp7WG0tdSiSRyul+MtQiZjtPKRX+lgluhCM43HILAUAc3+y38WvHXw4+EPjOw1rwpqHif9n/VEurbWov7ME9vb38lsRBKkxHyMJEt8nOB8p4baa9T+Evx60T9sj4AL+z58UL6O2+IVrsHgbxVec/aLpQRFb3EhJ2u3EO7GHVhn94oLdv8Aso/tZeM7Xwp/whngvw5ofxN+G1mFsBoniK/0rQNYjieMmeNIPOKTwlnOHZSW+YMc8jZi1L4lfAuGLV/hj8ILfW7rS5IdPsLPV/AbPrEFgJCzW66jYvJDcY+VPMYq5VFbBYtkAo/sq/FnVbpbLWUsrq2+NPwstDoXiTwtINt54p8PxkBlEZIL3dntYqMbjsRSTvGP1D8M+JNN8YeHtN1zR7yLUNK1K3ju7S7gOUmidQyOPYgivxz+OHx80fxF8ePCvxf1f9nnxxoPi7SV36vZS30+nxTTwhPsswmW33hkKkNkLuUKO1esfA//AIKtfD3wdrV/aX/hrWvDXhG+Se/XSYPKvE0u+Z2kkS3ZdhME5Zm2Mo8qTOCUkxGAfqXTT0/H+tfJvhD/AIKBWPjDw7Y63Z/Bz4nXOm3yLLbXGn6XbXayxnPzqEuNxGRjAXNYvxu/4KAWHh74Va1d+HfAHxEj8Sy27Q20GqeGbuxS2d1KrLJKV2gLnd8pJOBQB8pfBG8Nr8Q/hldW9ssyRfE3x3NEzSh3DLpsDKu4fK2cA7h1IGK5D9j6bT9O+HPhDxBq+tXmoa9rHjyxiSOSZpBZaPoMI1GdSzfcQbkIXI4VCOA1aP7O/wCzV4M1L4XeCfG0f7Q7eCviteXN3caVo093AEttYWVkVXidtylkjRX3Abt69RhW5FvhD8IdB/Zy0D4q+GvixqFv4st4be38Y+G9Purea58q+b7LerbxMEMbeW8vDblYDGQMGgDq/hH4Tv8A446p8CvhrNDJbyeKtf1D4oeLZo03GWHznW2MhH3cxwyBc8f6ShHJwf2bWvyW+Fus/CH9hfx34U+JPgX4saf8RPB3iS1XRde0q4uoW1nTbeQrJFcRwR/PtjZMSRsoYDgAkjH2pqf/AAUO+Alh4R1HxHb+OP7UsLEhZEsNNupJS7fdTaYhgseAWIXJ5IoA5r/gpP8AtNWXwD+Auo6NbP5vivxhb3Gl6dCj7XhjZCs9yfZFYAerOvYGvSv2KfBL/Dz9lT4YaHLFJBcR6LDczwzIUeOWfM7qynkENIRz6V+a/wAH9V1X/go5+35aeKtd0u4fwLoLC8GnzLvhs7KAk21vJztJmmwXHO4tJgbRx+zC9KAFooooAKKKKACiiigAooooAKKKKACiiigAplPplJgfP/7ef/JqXjf62P8A6XW9flH4f+IHifwXZ3iaB4j1bQo5vnlTTb2S3EjBSAWCMMkDua/Vz9vT/k1Hxv8AWx/9LrevyEm/1Un+4f5V91kcVLCTTV9f0R8tmV1XjZn2x+3h8TvGHhPxp4Fg0TxXrWjQz+GYZ5Y7G+lhWWQyuC7BWGWwByeeK8L8H+EfjD+095tlZ3uteKrHTW82SbV9SY2ls5XGd0rbQ5XPAy2PavTf+CiTbfHHw+OM48JQnHr+9euh+OF5feFPgX8G/gx8P0ka58XafFqV8bIYfUHlCHaWHVWkdmbPRY1B+UYqqE1RoUvZpc0m9X0sRUi51ZOT0SPFPBejt+zJ+0FoD/E/wxPLFpMyXj2kEiOCCD5VzGQdsqqw3BcjJTHBGK9A/bI+FWp6/rV18ZfD+tDxt4F8QMkg1G2GW03ACLDIo+6gwFBIBByrgNy2f+29Npum+LPAvgmwvP7X1Lwj4cg0m/uo/nLz8ER57sAM47eYB1rov2gJP+Ge/wBm/wAHfBy3k8rxFrv/ABUHiby25G4grE3tvVV+lv8A7VbKc51KNdfHLS3l38jPljGE4P4V+Z8y+BTIvjPRDDjzftke3JxzmvpTxF4Olj1jS9d0qYWWt2/z211Gh/dkZ5BB45Y+9fMvhNnTxRpTINzi5QgE4zz0zX034Njv/E98ttHcRsYoSLV5B1U4PynPBx8pz6V5mf8A8WFtrHo5V/DbL/hP4wfEP4a6Xe6WJI2t7lvNF9In2j7Mykt8qYyUJyTHzjdkHjFdfof/AAUAvdJRdP1y0VGiQm4vbCUoJZHZ/uo6AgrvUnj+Do1cp4i8H69b2ebnyYnz5YJIK56bcg8n6ev5VI9I8Paf4YuLzULZNcv127IRgB3P8KA9cdPoDXyx7eps6h8ePGWsfb7rRLmL+xdU+a7a+U+UzNu3LDuycbgH9AeBWv8As7/E7VtF8XXGmaibPUv7ZmjtNSIiMYNvtWNFyAWAVWc+5LEnJBryVvFsumRi61GzuoIGjL29qYwoLHO1V/h2gHnPr7Gus+FN5LfeLtNkWeO1RiJLwGEvLBGMM7qByGKg4zjnB6UBqVbWy1Hw7+0l4t8M+ENN8+S7X7FZWMM4ZIwJD8itwoXglvQ7s8g19It8J9Z+OnhXwr4r0zxNJ4N+I2m6csM8dmxNvfWyzSLD5jKQ3Jicq4JxuPykYrw7w3Hf+Pv2uMadPJbf29ZXAMhIxbw5wzgjGWVC/pya+tf2ftei8UeKvHOo6ZGLbw9amy0bSoAcqIbaNxuHtukYfVcdaTGiH4W+NfH/AIQ1f+wPiJpd1Lp8gVbPxApWVFlyQY5WXqp4KuRnqD2x7urCRQVIKkZBHIIrhvhx4guNSW903UUlS8hH2krL0aOR3AKnAyuUbGBwCMnNJq3iqDS/EEVnpx3PHFNF9jVXClovLldVUcbjGx2kAnOO2agpHfUVXtrhLy3imiO6KRQ6tjGQRkGrFIYUUUUAFFFFABX4e/8ABUz9ne8+Df7QM/jfS7doPDXjGVr+GeAkC3vgAbmMkfdLMfNHqHbH3TX7hV558b/gr4Z/aA+HGq+DPFdmLrTL1cxyqAJrSYA+XPE38MiEnB6EEg5BIIB+ZfwHsz8QJrHxt8D7nxF4uit7IQa98JLrx7e6Tf6PP8o+02d0sq+dASGxvyB5mCMnCetv+1x8EvC9vcWPjvWvjF4B8W2a+Xc6DreoX89wzLxhSWeORcg4dtucntX53/tAfs9/Eb9jb4nfYNQlvLDDu+j+JdMeSCK9iH8cUinKOARujzlSe4IJ838ffFDxd8VdSt9Q8X+JNU8T31vAttDcardvcOkY6IpYnAzk+5JPU0AfZHjvxt+xZ8RPGU+q6pF8XdW1S62CS6txajzCqqiDaSDnGBwOo96d4g+Fv7N/wd8VaXqupp8YPA8EgJXSPGnh+aKO5BUjcstvLBINpKn5XOCOQRxXwYoywFfr9+xf8ZvAPwl+CfhPwf8AGj4mrrMvi7Sl1/TNG8UWLSWOn2fmTQiBZ3DqQTA5CsVAxhV55APN/CXxc+DtrqVxa+FfjZ4ijnkSYWFleeNtd0WzWQLlN7SW0iLHkcb5CeTnPArppvCfxD1PQ/DlxD4m174q6RPZH+1/EMOm6DrmlT3zBQkQZYbiaC3gDNJLMyyO6rtSMM2R9DN+x18E/GXh258U/A/+xvCvjWBvtejeLPC960sdnd43Krxq7RmJwxR4iuCjsMDivlvwZ4H0j4gW+k+I/E8Np8MPHlrqV7pWt6x4Bd9BbTiJGt/MnhjbY0lreNaeY4wDBfxu33SQAYui+EvCfiq+t7KZfh74na4SZIdLt/hmLPXb66iLeY0dpaXMDW9sAD/pF28A4JK4G6reg/DOy1PRo9O0nw9pGqeJFcDWbPwT4w1u00fw9CUZpWu9UmuJrRXQqF8qMPyGA3BQT0fhP/hacvhW/HiDxbpfxHsI7W21Cbw58TtB8+dbXzVs9YDXKnzoXsZ1fzYwHAjaJ/49p5Xxj/whum3tj4J8X+B/Hnww/sm81C20Wz0Ur4v8MZjlYXdxHY3SZAV5FkB2EgSq2ACtAHkX/Ch/h54mvfEuuTeFvEVt4c0e6MN94xj+INjPo9zcBN7R21xNp4a7lJ4EcQdifXIJ9R+Heg6t8R/FF5pel/Dn4kf29oUEFxdre+E/C4ntHcK8SySXNpEdzIY3BJ3kc7cDNZvjL4kTeDrGTxiPiv8AD/4o6va7F0rX5JZ7XW9Dgd4Q/wDZ+iyhbWJ1XLoQgYE5B+QV9+/EL9oj4LfsR+BbLR9S1do7oxG6t9HgL3eq6hI3zNPNk7vMkYlmlmK7iTycYoA+cvE+pfE/4SeH9Q8VeIIPiRo2mWKiWa9i8B+EbxoI8EszGCVWwDjLY75OK+LPiX+0N8Y/21vF2n/DXTNc1bxVodxqWdN0/wDsu3sZZgSAst0lsNnyDLEliqAE5HWu/wDib8UPjp/wU+8eLoHhDw7cWXgWxuS0FjGxSxtDjia9uSNry7c4HYZCLkkn9Jf2NP2LPDf7I3hO4S1uX1vxdqscY1bWJF2q23JEUKfwRAknnLMeWPQKAdd+y/8AsyeFv2WfhvB4Y8OReddybZtU1eRcTahcBcGRuu1RyFQHCj1JYn2SiigAooooAKKKKACiiigAooooAKKKKACiiigAplPplJgfP/7en/JqPjb62P8A6XW9fkLIpaN17lSB+Vfr3+3p/wAmo+NvrY/+l1vX5D/56195w+4/Vpp9/wBD5TNL+2TXY99/bD+LPhn4ueKvCF94XvpL6207QIrG4aS3khKTLIzFQHAzwRyOK5Dwz+0t8RvB/hW28P6R4hNrY2kckFpMbSJ7q0jfl44Z2QyRqcDhTxxjGK8x/wA9aP8APWvdhhqEaSpSSaWup5s6lSU3JdTqvhz4zg8G/EnQ/FOraafEUVhqC309pPOVNwysWyzkHLbsNzkEjngmvqD42fCOy/aufUviv8Jtek8Q6i8Uf9q+FNQZUv7TYgVViXPTA4Q5DHJR2J218a/561u+C/G2vfDvxJa674b1ObSNWtmylxA2MjPKMDw6HurAg+lY4jD881WoytJfdbsaUqllyTV4svfDHRLjWfiZ4d0mP9xd3GoJbr5qn5XyRhh16jBr6zs/D83hvXbWGf7Vpl9FJ+8s2TDh8cumOqnB6V8v/BnVLc/HDwjqWqzeVbNrcdxdTQ8bNzlnZQOmCSa/Sjx9o0OqX2l3NpqlrrtrI4S3upFB8r5egfOGJyBknjoT1r5jPZXqwXWx7eVpqm10PNtf8L2knh7+0rm6MrlxgSdAc4AHHbIFeRahDbPqEEMVk9wgU5EkLGQYGcDt/wDXzzwcfYvhXQ/Dy+G77w/rdgzX1vC832zyg0gj5CurDhSMnB6HHfmuR+BPw90jxZq19qOojyrmwH2dYYrz95cHaVadgpGxSCRsxj5uSSMn5i9j29z5v17wn4l+MWp6VDoHhybVdN0/yLdYYeIEjzkNuA4VSOcZOdvFfQ3w5+E9v+zr4T8TeI/EMAtNQisZ0t5rVkkhijCAZAYgFmbbhW/u9ua+mdD0PT/C+j2umadAlnp9nGI4YU+6ij6/zr5G/aRvtX+NHxc0r4YxX1mnhu1/4metSWwZzaWqgEvLJkYZkLAY4Xd1J6TuGx5T4Gvpfg78F9f+I96pl8X+NZG03QrR7Z4pI7MuDJIFx91l2tuXjLDn0+pPhD4ZT4F/s2tqN0PI1GPSWvrj7REUIlKM4RhuJ++3qDz2rwPQ9Fn/AGkvjlp13pWiWll8OvDtokWlF5wIorZDtEnlL1yQwA3D19x7F8do9S8SeAfD3hzwRf2tzpEk0S3wu5WikkhDBs7jGc9DwMcn2pgdz8B76/8AE/hPS59ds3iv9Ot4oYMRFYQoTBZW3Hcx789AvAyasfEvUNK0/wAQWqM/k3trHLq7NDH824IsSFmzkFsFc4PArK+GerT+ENU1u0vJLc6D5klxb/Z45pJwxZchht24GW98KD61w3xa8F+JfHGo3l/oN689vqFwLOO3gjaORGZcqzEDhAChL5yPwFIZ65+z3NLdfCXRbiSdbhZ2uJ4WVcARNcStGo5OQFKgHPavSqxvCmgW/hXw3pmj2oAt7C2jt02gDIVQM4Hr1/GtmpKCiiigAooooAKKKKAOL+K3wm8K/Gvwbe+FvGWjQ61ot2MNBMMMjAHbJG4+ZHGThlIIzX5FftO/8EnfiB8Mr681f4bLL4+8K5aRbOPaNUtU67Wj4E+OAGj+Y/3BX7U0UAfy5a54f1Pwzqcun6vp13pd/CcSWl5A0MqfVGAI/KvT/CXxn0S+8F6V4K+I/hh/E/h/SzIul6nYXZtNW0qOV98iRSENHLFvJfypUIDFtrJuYn+gb4mfBbwP8YtK/s7xr4V0vxJagfJ/aFurvF7pJ99D7qRXzL8Rf+CS/wABvGi79IsNX8FzhQA2jagzoSOhZJxJn8CKAPz+/Z/+KPhr4J2Ximf4SfGWx8I634hghtjJ498LTrPaqjlsRT2zXEHPdpI+eMBTzXqfxA+PHgu71OLxLf8AjLwXqviLXrBtR1nS9F+1PpraraxvbyxkvErJDqenTS28gKkrKkTFjtBGz42/4Im6/b3UreEPiTpt5AVzHHrdhJbuD/dLxFwRjvtH0rnNF/4IsfEu43HVfHXhaxw+F+yrc3GV9eUTB9qAOVtf2vvCWi6+LzS/EV7cyWtu11bXWuaY8puL61j+zxC4CsS0eo6cI7S6A6TQxzZO0Gp/EH/BSGPS76K28PaI13Z6NFb3fhrWJVNvf2NyihRDdAMyzx/ZybKVgQZo445PlcDHv3hX/gib4UtbeL/hI/iTrWozZBkGlWMNquMcqDIZD17/AKV9A/D3/gmP+z98P7mC7/4Q1vEl3CpUSeIbt7tGz1LQ8RE/8A47UAfmDN8dvjn+07IPD3gTwvdzpGkliW0O0lvLn7Ezboba4u5S5McO6QI7srASsCxGMfVnwB/4JP6z4u8RP42/aH8QXGrapdTC5n0S1vmnmuX7/a7vJJ6Y2xHp/GOlfpV4e8MaP4R0uLTdD0qy0bTov9XZ6fbpBCn0RAAPyrWoAwvCfhHRPAug2mi+HtIs9E0m1XbBZafAsMMY6cIoA/qa3aKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigApoHFOplJgQXNrDeQtDNEk0TdY5FDKcHPQ+9Uj4X0jr/Zdl/4Dp/hXH/H74hX/AMKvg/4k8WaXBb3N/plussMN2GMTEyKvzBSDjDHoRXHat4y+Mnw+0uTX9b0Twz4v0K2Tzru18M/aLfUEiHLvGkzMkpVcnZuUnGBW8ITcU4uxhKUU2mrnsP8Awi+kZ/5Bdn/4Dp/hR/wjGkf9Auz+v2dP8K8f8cfGbX9S1X4YWXw6m0O5i8ax3lxFf61FNJEsUVusy4WN1YE5IIPQ8cV3vgVvHVlDqMnjm78Oyou1rdtCt54QigMZDJ5rtn+HGMd803GrFXbJi4N6I6P/AIRnSeD/AGVZf+A6f4Uv/CL6Pu/5Bdl/4Dp/hXnX7OPxrj+OPgOTV2hFpqFtdyW9xa7SuxSd8DgHna8LxOD0OTjpTLT45Q3v7Rlz8N4o1Nta6O1094VPzXgeNmgB6ErDIjkdfnFPlq80o66D5qdlLuekjw3pKtkabZg+ot0/wq0tlbpHsWCIR/3VQAflivH9e+K/izxb421bwp8NNL025k0Z1h1bxFrjyfYLScgN9mjjjw88oU5YBlVOATk4rN174jfEz4N2/wDbPjmw0TxN4PjZRe6n4ahngu9NQnBnkt5HfzYlOCxRtwGTggVPs5y3eoc8Um0tD3VLaKHOyJE3ddqgZpsNtFb/AOqijj/3FArzO6+LzW/xmsvDZl09fDM3hafxC+pOxBUpPGgbzN2wR7HLEkdgc4qPwD8TNe+Jus3utaTYW9l8OoYWSzv72KQXWrSj/ltCu4CO3HOGYFn4IwKj2craj9rHoz1VlDAg8joc1Wi061gL+XbxR7xtbagG4eh45r5i0H9oX4j2Pwl0H4p+ILDwvfeDrswvf2empcwX1pHJOIRIhd3SQqxBK4XPY969M1jx94t1D4neKfBvh4aLBdafotjqVjc6pDK6ebLPKkgkCOCV2R/LtwQx5JHFW8PON/IPbRZ6tDbx26bYo0jHoigfyqVVCrjAAx+FfOngnx98ZfFPj/xX4ca48CxDwzeWkF7Mtje/v1miWY+X+++UhSR82efat+++KXjL4i+J9W0b4YadpI07RblrPUfE2vmVrU3K/wCsgt4YiGlZMgMxZVByOe7dGUXZiVWLWh7b9OlJgKoAGB0xXhGo/E/4gfB64t7z4k2eiap4PllSCbxH4eSWBtOZ2Cq9zbys37osQDIjfLnkeul4++JPiq8+K9h8PPBI0iz1E6R/bl7q2txyTxpAZjEiQwxshkcsCSSwVR7kVPsZX0Y/aRSu9z2Yc06uR+H914um0mePxpa6VBqkFw0aXGiySNb3UOAVlCON0R5IKFmwVzuIIrrqxacdGbJ31FooopjCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACmninUzNAHin7Z3/Jsfj3/rzX/wBHR12Pjz4peHPhb4RbVddv4owIgILNHDXF5Jt+WKGPq7scAADvk4AJrpPE3hnS/GWh3Wja1Yw6jpd0oWe1uFykigggEfUA/hXJ+E/gH8OfAupJqOheC9H07UF/1d3HaKZU/wB1zkr+BFdEZw9moy7nPKM+duPU+ZtD+E95p8H7NnhHxFNqGi3TLrtxcLpd7JaT2hkiNwsKyIQy7Q4QgHsR0r1z4qaFB8FPgL4/udI1bXtWu9QsRZ27axq81+6TzHyIvLMrHb80wPHXAz0r1Hx18KvCXxOjs4/FWgWeuJZszW63abhEWADEc99o/KsrQvgF8PfDFncWmleEtNsba4uLe7liijIV5oGLQuRnkoxJH1raVeMrOT2/zuZRouN13PI/GzW/7JmteHvFtvbyzeF7rQ4/DmrW9shJ+0W0JOnygAEkttkgyeBvSqF94KvvhP4Y+FXjPVl3eJh4rW98R3A4AfVFaC4B5+7Gz26D2hX0r6Z13w/p/iax+w6pZxXtp50U4hmTK+ZHIskbfVXRT+FN8TeGdK8Y6JPo+tWEOpaZcFDLa3C7kYq4dSR7Mqke4FZrEaLv1H7H7jxP4D61afDvxl44+HuvyR6b4gufEF5rmnNcEINUtbp/MWSJj991O5GUZI2j3x1P7RHxC0nwj8OdY0mUrqev65ZzadpehxEPc388qGNVSMclctlmxgDPsK7Pxt8OfDHxJ0xdP8T6DZa5aK25EvIQ5jY9WRuqn3Ug1j+A/gV4C+Gd4974a8LWGl37gqbxUMlxg9VEjlmAPoDip54SlzvcpQko8i2Pl7xZ8BtT8R+P/h94FbVVt9Y0X4dRFlmUy2N7NbXduPs9ynWS3Zhggc8KecYP0f8ADL4pQeNdL1LRL/Tj4a8YaLF5Wp+H5SN0Hy4WSIjiSBv4HXjHHWu5bwxpUniaLxA1jC2tR2rWSXxX94sDOHMef7pYA/hVfUPBOh6p4isNfutMt5tZsI5Ira+K4ljjcYdN3Uqcn5Tkc9KcsRzpKXQUaPJsfEfwO8O/ZfDfwmbx/q2qav8ADfWYIf7LtZLhYrGx1VJXMcFzGijzY5CA0ZdiA6FWBBBr6U8OH/jLLxn/ANirpf8A6UXVd3J8MPCs3gf/AIQ59Csn8L+UIRpbRAw7Q+8DHswDDuDzWnZ+EdJ03XJtXt7KNNUmtY7KS65MjQxklEJJ5ALMfxrSpiFUcn3JhRcLank/wY/5Lz8eP+wnpn/pAlZ37MOvWXgjT9S+FWtTpYeLtD1G8lWC5YI+pWs1xJNFdw5/1isH2nGSpXBA4r2zSvC+laPrGrapZWMNvf6rJHJfXEa4e4ZECIWPfCgCsnx38KfCPxNs4rXxT4fsdbjhJMTXUYMkRPUo4wyE/wCyRWTqxldS2dvwL9nKNnE86/ao8aafD8N9T8E2uzVfF/iy3fStK0WLDzSySgqZSv8ACkYy5dsKNvWp9S+HfgP4gTaf4U1HUZP+E58J6fbqupabcSWmpWatGAJY5VwSrYPHzLk8jNdl4B+Cvgj4XyTS+GPDVjpNxMNsl1Em+dx/dMjEuR7ZxT/iB8H/AAb8UWtX8U+HrTV5rUEQzyKUmjB6qsikMFPdc4PeqVSEUopuwuSTd3ucR8A/GOvah4t+IXhDVdd/4S2x8L3VrBZ+IGiRJZjLGzyW8xjAjaSHCqzKATu+YA8V7fWD4T8H6J4H0OHSNA0m10bTISfLtbOIRoCepwOpPcnk963awqSjOV4m1OLjGzY6iiioNQooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigBKWiigAooooA//Z)

MSc in Data Science

***Big Data Management***

#### **Project 2**

**Nikolaos-Marios Tsarouchas**

***AM: dit2120dsc***

***Email: dit2120dsc@go.uop.gr***

**Zoi Papakonstantinou**

***AM: dit2118dsc***

***Email: dit2118dsc@go.uop.gr***

**Contents**

[Abstract 7](#_Toc107139909)

[Glossary 8](#_Toc107139910)

[1. What we know about the publications of the very popular channel Saturday Night Live? 9](#_Toc107139911)

[2. How many tags are commonly used in video posts? 10](#_Toc107139912)

[3. What are the most popular tags in upcoming videos? 13](#_Toc107139913)

[4. What impact does the deactivation of comments have on the public? 14](#_Toc107139914)

[5. What were the most popular dates for video posting? 16](#_Toc107139915)

[Conclusion 18](#_Toc107139916)

# Abstract

The purpose of this project is to study data related to the most popular Youtube videos during the period Nov’17-Mar’18. The data are reported in the ten regions: U.S.A(US), Great Britain (GB), Germany (DE), Canada (CA), France (FR), Russia (RU), Mexico (MX), South Korea (KR), Japan (JP), and India (IN). Data processing became into a NoSQL database, MongoDB. In the first chapter, we showed the number of views, "likes" and "dislikes" for each video for the channel "Saturday Night Live". In the second chapter, we created a new metric that counted the number of tags for each video and visualized the number of views and tags in a scatter plot. In the third chapter, we compared the number of videos displayed on each tag between the two areas of Grant Britain (GB) and the USA. The results were represented by a bar chart. In the fourth chapter, we calculated the average number of views, "likes" and "dislikes" for videos that have disabled comments. We visualized and analyzed the results. In the last chapter, we grouped the videos by publication date from December 5, 2017 to March 5, 2018. We were asked to visualize the data with a scatter plot but we could not draw any conclusions, so we visualized them with a bar chart.

# Glossary

Existing Dimensions/Measures

|  |  |
| --- | --- |
| video\_id | Unique video code |
| trending\_date | The video date that was found in the list of popular videos (in YY.DD.MM format) |
| title | The title of the video |
| channel\_title | The title of the channel that posted the video |
| category\_id | The code of the category to which the video belongs |
| publish\_time | The date of publication of the video (in ISO 8601 format), |
| tags | The tags used in the video |

New Measures

|  |  |
| --- | --- |
| Num\_tags | Numerous tags that appeared in a video |
| Count\_tags | Count the appearance of tags |

# 1. What we know about the publications of the very popular channel Saturday Night Live?

We found the publications of the channel "Saturday Night Live" in the area GB (Grant Britain). For each video, we displayed the title of the video, the number of views, the number of "likes" and "dislikes" and sorted them in descending order of views.

Firstly, we imported the data into MongoDB Compass and filled in the fields as below.

**MongoDB**

**Graphical user interface, text, application, email, Teams

Description automatically generated**

Secondly, we copied the code and ran in Python.

**Python**

We displayed the results with aggregation and with mongo query:

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

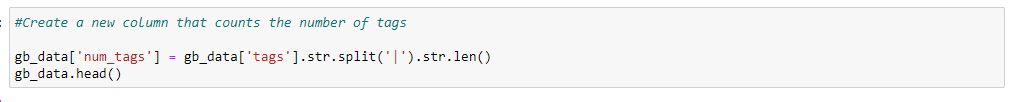
It is observed that videos with many views have more likes as opposed to dislikes, which is to be expected because the user often watches the video he likes.

# 2. How many tags are commonly used in video posts?

We tried to approach the number of tags in two ways in Python. In the first way, we created a new column that counts the number of tags and the second way was to break the tags into a array.

**Python**

Create a new column:



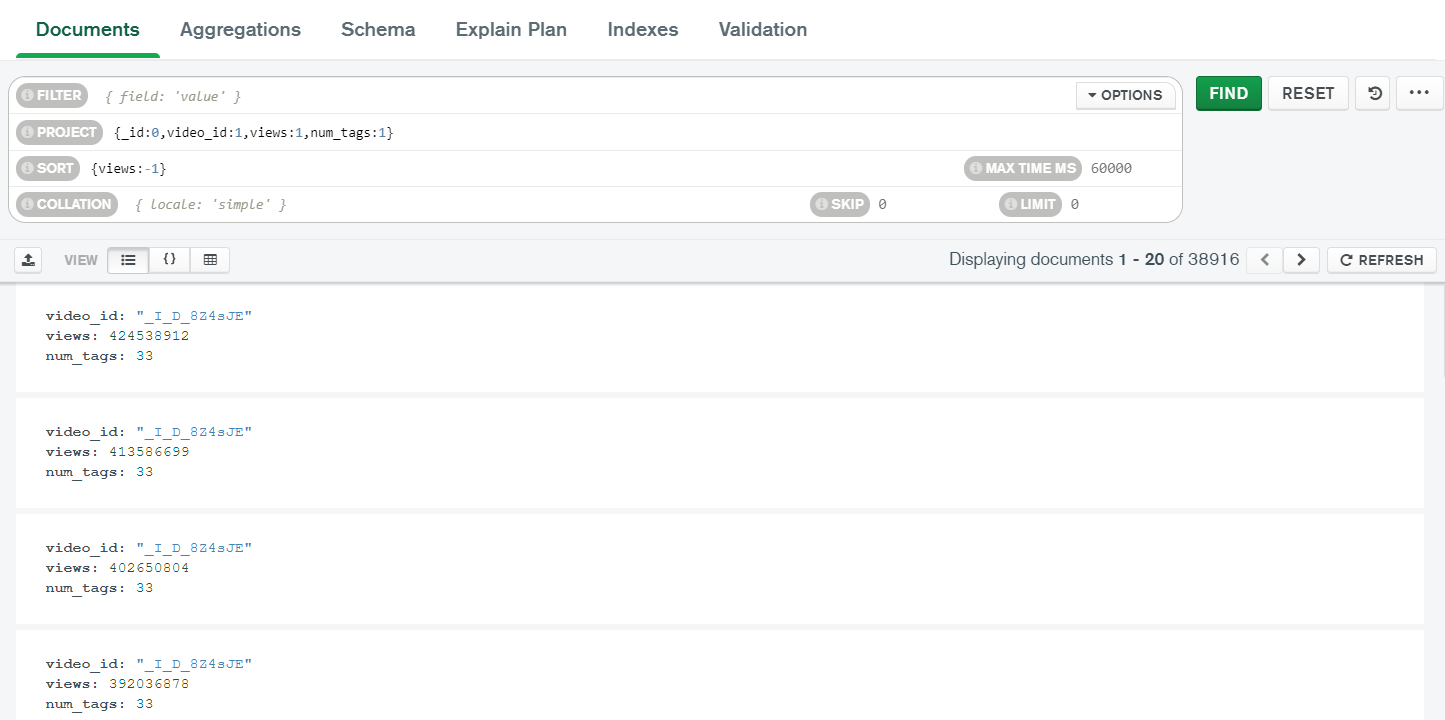
Break tags into an array:

Graphical user interface

Description automatically generated with medium confidence

After calculating the number of tags, we imported the new file into MongoDB Compass and selected the required fields.

**MongoDB**



As mentioned above, we copied the code to run in Python and created a scatter plot that shows the number of views on the x-axis and the number of tags on the y-axis.

**Python**Graphical user interface, text, application, email

Description automatically generated

Table

Description automatically generated

A useful graph for understanding the extreme values in this case is the the box plot:

A picture containing shape

Description automatically generated

Because the range of numbers is different, we split the graphs into two to better understand the outliers:Box and whisker chart

Description automatically generated with medium confidence

According to our results, the number of views and tags are independent measures. The number of views from the tags is not affected, so the views in a video do not increase if it has more tags. Clearly, in each case, there are outliers but the issue of views we consider to be other factors and not the tags. For example, the large number of views may be due to the advertising of the video that has been made, the artist the type of video.

# 3. What are the most popular tags in upcoming videos?

We calculated the number of videos for each tag in GB and USA.

**Python**

|  |  |
| --- | --- |
| Grant Britain (GB) | USA |
|  |  |
|  |  |

It is observed that the main labels such as funny, comedy appear in both areas. In general, the number of labels in the US is larger than the BG, this makes sense as one area has a larger population than the other. Note that there are many "None" in the two regions, perhaps because the youtuber has blocked the tags or the user did not find the video interesting.

# 4. What impact does the deactivation of comments have on the public?

We calculated the average number of views, likes and dislikes per comments disabled in Python.

**Python**

|  |  |
| --- | --- |
| Comments Disabled=False | Comments Disabled=True |
| Text  Description automatically generated |  |
|  |  |

To have a complete picture, we divided all the measures by 1000 so that we can compare them.

Chart, bar chart, waterfall chart

Description automatically generated

According to our results, users did not prefer video comments to be turned off. The specific preference can be found with the number of views. The videos that have the "dislike" comments off are no more than "likes". Users do not think that disabling comments is a good way to avoid negative attention.

# 5. What were the most popular dates for video posting?

**Python**

We approached the request in two ways. Initially, we changed the data format to display the video publish date split by year, month and day.

A picture containing rectangle

Description automatically generated

We limited the period between December 5, 2017 and March 5, 2018 to calculate the number of videos per day.Graphical user interface, text, application

Description automatically generated

We represented the data on Scatter plot. As a first idea it is observed that most videos are played in December’17 and February’18.

Chart, scatter chart

Description automatically generated

Due to the volume of data, we could not conclude anything from the scatter plot. We decided to visualize the data with a bar graph showing value fluctuations. It is noticed that most of the videos were published at the end of the year and most of them appear at the end of January’18. In addition, we found that most of the videos are published at the end of each month.

Chart, bar chart

Description automatically generated

# Conclusion

In recent years, video posts have increased with the result that comments or likes play a decisive role for the user. According to our analysis, we noticed that users prefer comments to be displayed. we noticed that most videos are published in the last few days every month.