IMQA 2022 原稿 ver1.2（日本語版）

M1 中田雄大

＊＊Abstract＊＊

・JPEGの離散コサイン変換（DCT）は，直交変換に人間の視覚特性に基づく量子化法を加えた有効な画像符号化方式の一つである．

・しかし，DCTの基底は画像の統計的性質を考慮しているため，符号化レートが低くなると，局所的な特徴の領域で符号化画像の画質が劣化する問題がある．

・一方，独立成分分析（ICA）は，入力画像の構造的特徴に対応する基底集合を作ることができ， DCTとICAそれぞれの長所を活かすことを目的として，ハイブリット型の画像符号化方式が提案されている．

・ICAを用いた符号化では，送信側と受信側でICA基底を共有することが前提となるため，基底を保存するために必要な符号量が増加する問題がある．

・この問題を解決するために，従来手法では，符号化性能の向上に寄与するICA基底のみを使用することで，基底を保存するための符号量を削減している．

・しかし，ICA基底を保存するための符号量を考慮したときの符号化性能は，DCT単独のものと比較して，実用的でない超低符号化レートでのみ改善がみられ，それ以外の符号化レートでは大きく劣化していた．

・これらの課題を解決するために，画質の観点から各ICA基底の組み合わせを評価し，削減できる符号量と基底を保存するための符号量を比較することで，符号化性能の改善に最も寄与する基底の組み合わせとそれを適用する画像中の領域を決定する．

・その結果，ICA基底を保存するための符号量を加えた場合でも，PSNRが30~50[dB]の範囲で符号化性能が改善され，従来のハイブリット型符号化方式の課題を解決することができた．

＊＊1. Introduction＊＊

・画像符号化の標準方式に採用されている離散コサイン変換（DCT）は，エネルギー圧縮を伴う直交変換に基づいた有効な画像符号化手段の一つである．

・DCT基底は，どの入力画像に対しても同じものが適用され，人間の視覚特性に基づいてDCT係数を量子化するため，平坦な特徴や規則的な特徴の領域の保存に有効である．

・しかし，低符号化レートでは，モスキートノイズやブロックノイズなどの視覚的な歪みの問題があることがよく知られている．

・一方，多次元信号解析の一つである独立成分分析（Independent component analysis：ICA）は，入力画像の構造的特徴に対応する基底の集合を得ることができるため，ICA係数のスパース性に着目することで，画像の局所的な特徴を少数の基底のみで保存することができる[1，2]．

・すなわち，DCTとICAでは符号化において得意とする領域が一枚の画像中で異なっていると言える．

・DCT基底とICA基底を併用し，DCTでは保存が困難であった特徴をICAによって保存することで，入力画像の特徴を効率的に保存することを可能とする，ハイブリット型画像符号化法が提案されている[3，4]．

・[3，4]では，入力画像を小さなブロックに分割し，DCTを適用するブロック（DCT\_Block）とICAを適用するブロック（ICA\_Block）の2種類のブロックに分類している．

・ここで，ICA基底は，入力画像ごとに求められることから，送信側と受信側で共有することが前提となる．

・高い画質を得るためには，多種類のICA基底を用いることが望ましいが，ICA基底を保存するための情報が増加してしまうため，符号化量の観点で望ましくない．

・そのため，[3，4]は，符号化性能を向上させることができる重要なICA基底を選択することで，同等の画質の保存に必要な基底の符号量を約80％以上削減している．

・[4]では，それぞれのブロックの画質を最適にするICA基底の組み合わせに着目し，ICA\_Blockの候補に対して各基底の組み合わせがDCTから改善できる画質を評価することで，重要な基底の組み合わせを決定している．

・ここで，ICA\_Blockの候補は，64個のICA基底をすべて使える条件でDCTよりも符号化性能を向上できるブロックとして定義している．

・すべてのICA\_Blockの候補をICA\_Blockとした場合，ICA基底を保存するための符号量が大幅に増加することから，それは各ICA基底の組み合わせを評価するためだけに使用され，最終的なICA\_BlockはICA\_Blockの候補から決定される．

・しかし，基底の符号量を加えた場合に符号化性能が劣化することや，性能を改善できる符号化レートはPSNRが20[dB]前後の非実用的な領域での改善にとどまっているため，実用的な符号化レートに対するハイブリット型画像符号化の適用について検討する必要がある．

・それぞれのブロックの符号化性能の向上という観点では，従来手法で着目されているブロックの画質を最適にする基底以外にも有効な基底が複数存在していると推測される．

・そのため，提案手法では，従来手法の評価対象ではなかった，ブロックの画質を最適に出来なくとも画質を改善できる基底や，基底を用いなくても画質を改善できるブロックを評価の対象に含めることで，符号化性能を向上させることができる重要なICA基底とICA\_Blockを選択する．

・提案手法を適用することで，従来手法の問題が解決され，PSNRが30~50[dB]の高符号化レートにおいて，DCTよりも符号化性能が向上した．

＊＊2. ICAを用いた画像符号化方式＊＊

＊2.1 Independent Component Analysis＊

・独立成分分析（Independent component analysis：ICA）は，観測された多次元のランダムなベクトルを統計的に可能な限り独立した原信号に変換する手法である．

・入力信号が，独立な基底の線形結合により表現される場合に，と記述することができる．

・なおは，行列として表される結合係数であり，その要素は，入力信号に対する独立な基底の寄与率を表している．

・ICAは，基底及び結合係数に関する知識を持たないため，入力信号のみから基底を復元しなければならない．

・の逆行列およびの近似値を，それぞれおよびと表すことで，式(1)は，のように変形される．

・ICAでは，ICA基底の各成分を独立とする結合係数を求めることが目的となる．

・独立の評価基準としてはKullback-Leibler情報量[5]が使用され，Bellらによって提案された最急降下法に基づいた手法[6]を適用することで，相互情報量を最小とするとなるの更新則を得ることができる．

・ここで，は学習係数，は単位行列，はの確率密度関数を近似しているものであり，一般的にはSigmoid関数などが用いられる．

・本論文では，提案手法の中で用いる画素のDCT基底群に合わせ，ICA基底の個数も64個に設定している．

・画像“Barbara”，“Airplane”を入力画像として，式を適用することで導出されたICA基底をFig.1に示す．

・Fig.1を見ると，ICA基底は入力画像の局所特徴に対応しており，入力画像ごとに異なった基底が求められていることが分かる．

・画像“Barbara”に含まれる任意のブロックのICA係数をFig.2(a)に示している．

・また，Fig.2(a)のブロックに対して，係数値の大きいICA基底のみで再構成されたブロックをFig.2(b)に示している．

・Fig.2より，少数のICA基底のみで入力画像の局所的な特徴を保存することができることから，ICA係数にはスパース性[7]があることを確認できる．

・このことから，ICA基底を用いることで，局所的な特徴を持つブロックの保存に必要となる符号量をDCT単独のものよりも抑えることができると期待される．

(a)Reconstructed block with all ICA coefficients

(b)Reconstructed block with a part of ICA coefficients

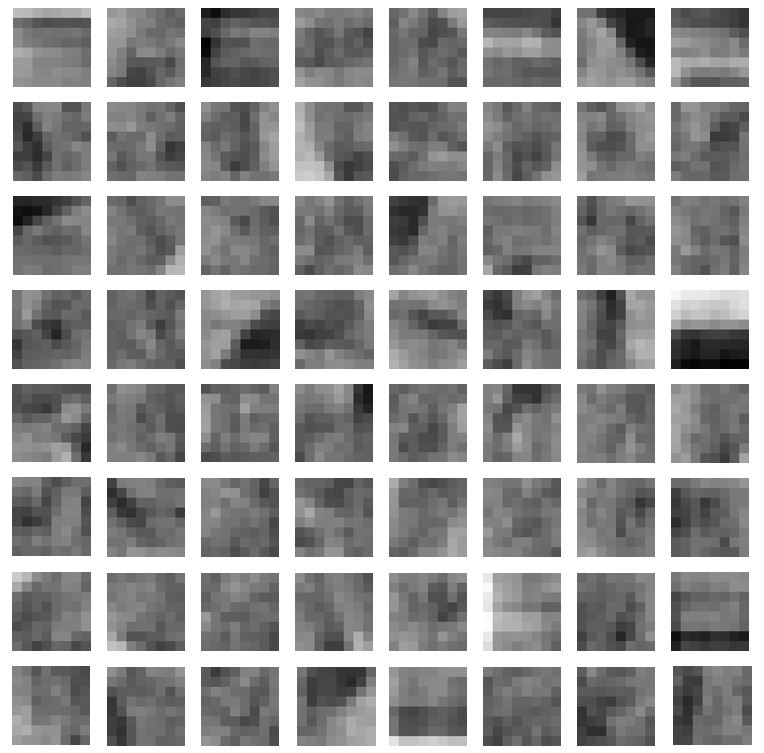
Figure2. Sparseness of the ICA coefficients



 ![屋外, 大きい, 建物, 座る が含まれている画像

自動的に生成された説明](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDiRXhpZgAATU0AKgAAAAgABAE7AAIAAAANAAAISodpAAQAAAABAAAIWJydAAEAAAAKAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOS4reeUsOmbhOWkpwAAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzg2AACSkgACAAAAAzg2AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIxOjA2OjIwIDEzOjQ1OjAzADIwMjE6MDY6MjAgMTM6NDU6MDMAAAAtTjB1xJYnWQAA/+ELH2h0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDYtMjBUMTM6NDU6MDMuODU1PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPuS4reeUsOmbhOWkpzwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCANBAzsDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RorO8Rf8ivqn/XnN/wCgGvBaAPouivCIP+PeP/dFY2v/APHxD/uH+dAH0hRXypc/6g/UVSoA+uKK+VKjf71AH1fRXyXJ0FEX+uT60AfWlFfLdfSHhf8A5FDR/wDrxg/9FrQBqUUVm+I/+RV1X/rym/8AQDQBpUV83V0ll/x4w/7goA9tor5y8Vf8fVt/1zP86yrD/j8X6H+VAH1FRXznUVAH0jRXypqX/H8/0H8qtaD/AMfE3+4P50AfUNFfPa/eFS0Ae/0Vn6B/yLemf9ekX/oArQoAKKyPFv8AyJWt/wDYPuP/AEW1fLlAH11RXynF/qU+lbGkf6mX/eH8qAPpSivniT7hqKgD6Mor52qvL/rDQB9I0V8/6H/r5v8AcH860dQ/5Btx/wBczQB7fRXzDX0V4Z/5FLSP+vGH/wBFigDUoorC8cf8k98Rf9gu5/8ARTUAbtFfC9exeHf+RY03/r2T+VAH0NRXz/e/fT6VieIP+QLL/vL/ADoA+m6K+NR94fUV62Puj6CgD2+ivKtO/wCPFPqf51y3xJ/5Bth/13b/ANBoA9+or4+f7jfSq1AH2VRWN4O/5EXQf+wbb/8Aopa2aACiqGu/8i7qX/XpL/6Aa8WoA94or56k/wBa31pBQB9DUV4BZ/8AH0v0NaNAHt1FfPlSJ92gD3+ivCLb7zfSrUf+sX60Ae20V49Xquj/APIDsf8Ar2j/APQRQBcooqhrv/Iu6j/16y/+gGgC/RXhFZU//HxJ/vGgD6Mor5c1X/Wx/wC6f51mXX/HufqKAPraivjurlAH1xRXy7Yf8ea/U/zq7D94/SgD6Vor5yj/ANYv1q3QB9BUVn+H/wDkWtM/69Iv/QBWhQAUVneIv+RX1X/rzm/9ANeCUAfRlFeAxf6lPpTjQB75RXg0P+sFWKAPcaK8Eq9a/wDHuPqaAPbaK8N1D/Vp/vGs+X/Uv9KAPoKivm+vfvDn/IraV/15Q/8AoAoA0qKKo63/AMi/qH/XrL/6AaAL1FeH1494i/5GbUv+vl/50AfaNFfJngv/AI8rv/rqv8q7LRv+QpH/ALrfyoA+gaK8irm6APoGivC7b/UD6msrxN/x7W/++f5UAfRNFfLFt/x9R/7wrYoA+j6KzfDn/IraV/15Q/8AoArSoAz9fGfDWpg9DaS/+gGvDvIj9P1r3HXv+Rb1L/r0l/8AQDXiWKAJY/ljUDoBWLr5P2iH/cP861ftAXjaeKydYPnzREcYUjn60AY8/MRB9aq7RV24jKwk57iqlAB5r+v6VPEgkjDNyaZ9lb+8Pyp6v5K7CMkdxQBHdIEVdvrUUJ/fp/vU67mDKvB61FbvuuYx6sKANSvpDwv/AMiho/8A14wf+i1r5y8s+tfRvhjjwjo//XjB/wCixQBqVm+I/wDkVtV/68pv/QDWlWb4i/5FfVf+vOb/ANANAHgW0VeivZ44lRWG1RgfLVPFPDYFAFPWpnuJojKckKQMDHeq+moGv0B6YP8AKn6m2ZY/90/zqPT32XqsRng/yoA3PJT0/Ws7cau/al/un86zfMHpQBjapKw1BwD2Hb2qfRJ5BPNgj7g7e9VdT+bUHI9B/KrGiJmeb/cH86AN2O4kMqgkdfSrm9qoKNjBjzg5qb7Wv9w/nQB774f58M6Z/wBecX/oArQrN8Ond4X0o+tnCf8AxwVpUAY/jA48D66R1GnXH/otq+UvPk9f0r6s8ZHHgXXv+wbcf+imr5M8welAHT2kavZwsw5KAmtjSokEUmB/EO/tVDTrRpNMtnDAbowcYrVsojAjgkHJzxQAt4PLtWZOCCKzftEnqPyq/qsoi053IJwRwPrWD/aCf882/OgDepRCj8sOfrT/ACT6imtIIztIzj0oAltybVmMPBYYOeaTUb2f+zLn5h/qz/CKrTXywKCUY5OODVK+1RH0+dfKYZQjqKAMb7dcf3x/3yK+nPCjFvBmis3U6fAT/wB+1r5V+0j+6a+qPCBz4I0M+unW/wD6LWgDYrE8agN4B8QA9DplyD/36atusXxkM+BNeHrptx/6KagD5A+yxf3T+depaEdnh+wVeggUD8q848g/3hXoGkXIj0WzQqTthUZoAnv5GEiYPb0rI1ZjLpro/Kkj+daF7OJHQgEYFZ2oHdZMPcfzoAwRbx7hwevrXp4Hyj6V5uE5HPevRweB9KANOzlZbVQp4ye1cn8SZ5P7NsOf+W7dv9mult5QsIGD1Ncp8RG83TrEAYxM3X/doA4Jpn2nnt6VB5r+v6VM6YjY56Cqu6gD688GHPgPQCf+gbb/APopa2qxPBf/ACIWgf8AYMtv/RS1t0AZ3iElfDOqEdRZykf98GvCvtUv94flXuniQ7fCurH0spj/AOOGvn77Wv8AcP50AXNxbk9T1pMkUR/PGrDjIzUNxcC3ZQyltwzwaALUMjJKCvWrP2mX1H5VlW96rzBQjDg96uecP7poAi8xvX9Kesr7ev6U77I394flVWecW0xiZSxHcUAXIp5FJwR+VWrW4ke7iViMFgDxWRHeqSfkb86uafcCXUrdApBaQDNAHTbBXqWkf8gWx/694/8A0EV5t9lb+8Pyr0rSxt0ezHpAg/8AHRQBaqhrv/Iu6j/16y/+gGr9Z3iKQReF9UkIyEs5mwO+ENAHjWKpyQRtIxIOSfWq39vRf88H/wC+hVhLgSoJApAYZwe1AGdqVrEZI8qfunv71l3trEtqxCnqO9bN8d8iY7Cs+6iMluyg45FAGJ5Efp+tX/s0Xofzpn2Nv74/KtH7G398flQBa0+1i+xL8p6nv71aW3jU8A/nT9PtGFmvzDqe3vU7QFMZYHNAEKRJ5i8d/WrPlr6VGq4YH3qXfQB7ZoIx4c00f9OkX/oAq/VDQf8AkXNN/wCvSL/0AVfoAzfEhx4V1Yj/AJ8pv/QDXz55r+v6V9B+Ixu8K6qPWymH/jhrwD7K394flQBr2qK1pEx6lRmmXR8tlCcZFPt32W0akZ2qBmmXA81lI4wO9AEHnyJyp5+lH22f+8P++ajuf3EBkPzAEcCqX21f7h/OgDX3GrMMzrEADx9Kp76sw/NEDQA6ZzIoD84PFVplAgf/AHTU8p2gVXnf/R5OP4TQBm5NfQHhz/kVdK/68of/AEAV8+7q+gvDf/Iq6T/15Q/+gCgDSrO8RMU8L6q68FbOYj/vg1o1l+KG2eENYY87bGc/+Q2oA8G/tS6/vr/3yK811qVpNevnY5Zp2J4rs/7RT/nm351yl/YNcajcTLIqiSQsAR0oA6LwFGsthelxnEy9/wDZrrF/0Q+dB8rrwCeetc/4EsWhsbwF1OZVPA/2a3tTb7Hp7zN84UgYHuaAJP7Xvf8Anov/AHwKz/tUv94flWf/AG1H/wA8X/MVf8k+ooA1LKV2tVJPOT2rN8SOxtrf/fP8qv2Y22qg88mqWuxGaCEA4w5PP0oAwbdj9pj/AN4VreY3rWfFaMsyNvHBz0q/toA+g/DZz4V0n/ryh/8AQBWlWZ4b/wCRU0n/AK8of/QBWnQBn69/yLepf9ekv/oBrxLI9a9t1/8A5FrU/wDr0l/9ANeHUARO6iRvmHWqN988ibPmwO1Sy/65/rUZoAzrtSLZiQQMis/Na2of8eTfUfzrHoA0cVWmU+aeKt1DJ980AULr5VXPHNMtWH2uLn+MVJqH+rj/AN41Wtf+PuL/AHhQB0O4etfRfhj/AJFHSP8Arxh/9Fivm+vpDwv/AMiho/8A14wf+i1oA1KzfEX/ACK+q/8AXnN/6Aa0qzPEn/Iqat/15Tf+gGgDwTevqKN6f3hVemnrQA29jeaRDCpcAYO0ZxUVtDLFOHljZFAOSRxWjZ/cb60t7/x6t9RQBF5sf99fzqpuHrTKZQBnahzetj0H8qs6KwWeXccfKOv1qref8fTfQVNpn+tk/wB0fzoA22kTafmH51F5if3x+dQN901DQB9J+GjnwnpOP+fKH/0AVp1leF/+RQ0f/rwg/wDRa1q0AYvjP/kQ9f8A+wbcf+imr5Jr628Z/wDIh6//ANg24/8ARTV8kUAeh6RBK2i2ZWNiDCuCBVskW/E58styA3Gas6B/yLun/wDXuv8AKqPiH/j4g/3D/OgCrrM8T6XIFkUncvAPvXNhhkc96v3/APx5t9R/OsodR9aAO+8t8D5T09Kz7uaOK5ZZHVWAGQTW2Og+lcpr3/IYk/3V/lQAt7cQsibZVPPY1n3Dq9rIqsCSpAA71FL0FRj7woAo+RL/AM82/KvqzweCPA+hA8Eadb/+i1r5lr6c8Kf8iZov/YPg/wDRa0Aa1Y3jD/kRtd/7B1x/6Latmsfxf/yJGuf9g64/9FtQB8obW9DXY6cQNMtgTz5Yrla6ay/48IP9wUATXDDcvPaqV4c2rY9RVib7w+lVbn/UH6igCgAcjjvXoYU4HHavPh1H1r0YdB9KAHRECMA8GuX8eHNhZ45/et/6DXSmuY8b/wDHjZ/9dW/9BoA4iUfuX+lUMitGf/j3k/3TWXQB9geCv+RB8P8A/YMtv/RS1t1ieCv+RA8P/wDYMtv/AEUtbdAGX4m/5FLV/wDrxm/9FmvnXevqK+ifFH/Ioax/14T/APotq+bqAN2Aj7PHz/CKo6o6rLHuYD5T/Ordt/x6xf7orL1r/Xw/7h/nQA6zkQ3S4YdD3rT3L6isHT/+P1fof5Vr0AbXlv8A3D+VYepgrqDhuDgfyrqa5jWv+QtJ/ur/ACoArQn5j9K0dJP/ABObT/rstZkP3j9K0dI/5DVn/wBdloA9Br0LTf8AkE2n/XBP/QRXn1eg6b/yCrT/AK4J/wCgigCzWV4qIXwdrJY4AsJySe37tq1axvGP/Ii69/2Dbj/0U1AHzb9rt/8Anun51tW15bfZYv38f3R/FXC1s23/AB6xf7ooA3rm5gZl2yoeOxqvJIjoVRwx9Aazalt/9ePoaAJ9p9K0vKf+4fyqnW1QBNZDbaKG4OTwadOwCrkgc0kX+rFRXf3F+tAAHXP3hTsj1qov3h9anoA9y0D/AJFvTP8Ar0i/9AFaFZ/h/wD5FrTP+vSL/wBAFaFAGd4h/wCRY1T/AK85v/QDXg+4ete7+Iv+RX1X/rzm/wDQDXgdAF5JowigyKDj1oM8X/PRfzrOP3jSUAWL+RGsmCsCcjgH3rIxVub/AFRqtQBs+bH/AH1/OrUFxCIQDKgOfWsWnDpQBrXFzBtX98nX1qtLcQtC4WVSSOADWdP91frUSffH1oAnr6D8N/8AIqaT/wBeUP8A6AK+fK+g/Df/ACKmk/8AXlD/AOgCgDTrI8WEDwXrZPAGnz5/79tWvWN4x/5EXXv+wbcf+imoA+YfPi/56L+dQtBK7FkjZlY5BA61SrobT/jyh/3BQBreD43js7oSKVJkGMj2q94jIXQpSxwNy/zpugf8e83++P5U3xV/yLs3++n/AKFQBx4ljyPnX867ARvgfIfyrgh1H1r0kdB9KAEt/lhAbg5NVtTUvFHsBb5j0+lW6in+6v1oAyVikDAlGA+lSYNWm+6fpUFAHv3hv/kVdJ/68of/AEAVpVm+HP8AkVtK/wCvKH/0AVpUAZ3iL/kV9U/685v/AEA14Lvb+8fzr3jxIdvhTVj6WUx/8cNfPv2lvQUAStyxzSYpAdygnvU0MQkUkkjB7UAU7wA2rZA6is3Yv90flW1fwKlmzAk8j+dZGKAIN7f3j+dTR8oCeT71BirEQ/digChq3EMWOPmP8qpWZP22H/fFaGqpmKP/AHj/ACqnYxBtQgBJ5kFAG9gelfRvhj/kUdH/AOvGD/0WK+ffsif3mr6D8Njb4U0kDtZQj/xwUAadZniX/kVNW/68pv8A0A1p1m+Ixnwtqo9bKb/0A0AfPOaaTzVr7OvqarOuHI9DQBp6OqtDLuUH5h1HtTtZVV0uQqoB3LyB70mkHbDL/vD+VO1f5tMcH+8v86AOa3N6mjJ9TT/LHrUWaAKF2T9pbnsKl04nzH5/hFU7+dkvGAA6D+VS6ZOzSyZA+6P50AarMdp5NRZPqaDKcHgUzeaAPpnwt/yJ2jf9eEH/AKLWtWsnwr/yJui/9eEH/ota1qAMjxcM+CdcB5H9nXH/AKLavlryY/8Anmv5V9U+JoxL4T1eNiQHsZlJHvGa+d/7Ag/57S/pQB1GjKBoVkAAB5K9q5nxxLJHfWYjdkBibO04/iroLOY21jDAgDLGgUE9TXI+OrxzfWfyr/qm/wDQqAM6ylklu1SV2dSDlWOR0rUEMWR+7Tr6VkeG/wDTtehgk+VWVjlevArtv7Dg/wCesn6UAaAJwK4TxRLIviGYK7AbE4B9q6T+15f+eafrXI6/cNPrUsjAAlV4H0oAXTGMssgkJcBRjdzjmtSKOMyrlF6+lVfC1ol7dXCyMyhYwRt+tdG+kQwxtKskhKDIBxQBT8iL/nkn/fNfQvhoAeE9JAGALKHA/wCACvnzNfQfhv8A5FTSf+vKH/0AUAadZPivnwbrWf8Anwn/APRbVrVl+J13+EdXU97GYf8AkM0AfMflp/cX8q3LVQLSLAH3RVT7An99q2baxT7LF87fdFAFN1BIyBVa7UC2bgdR2rUmtERhhm6VUvbdfsrcnqKAMUAZHHevRQBgcdq4IQLkcnrXoot1wOT0oAqN96uZ8aDNlaZ/56t/KuomXZKQK5nxiu6ztf8Arof5UAcZKoMTcDp6VS8tP7o/KtUQLIdhJAbjinf2TF/z0f8ASgD6d8G8eBNBx/0Dbf8A9FLW1WR4TQR+C9EQchdPgAz/ANc1rXoAy/E3/Ipav/14zf8Aos1867V9BX0X4l58J6v/ANeU3/oBr552CgBA7qoAZgB0ANUdRZmkj3MT8p6mmzX8kU7oEUhWwCary3LTsCygYGOKALek86kgPIw3X6V0Oxf7o/KsDQl8zWI1PA2t0+ldX9lX+81AFncfU1zesE/2pJz/AAr/ACrT/tCT+4v61k37ma8Z24JA4H0oAZZjLtnnitbS1A1a1wB/rVrOsIw0j5PatbT4wmpW7AnIkBoA7TNeh6Z/yCbT/rgn/oIrzXzm9BXpOlnOj2Z/6YJ/6CKALVYvjL/kRNe/7Btx/wCimrarI8WoJPBOtoeA2n3AOP8Arm1AHyPk+ta9ux+zR8n7opn9lRf89H/StGGwRYUAduBQBWDH1NXNL+bUEDcjB4P0qGaBYmAUk5HerGkoDqSfRv5UAbflR/3F/Ktby0/ur+VZ/lj1q357egoAq3TMlwQjFRgcA1WkdiBlifqaj1C8db1gFXoP5VAl00hIKgY9KALIY5HJp+5vU/nVYSH0FO84+goA+gfDv/Ir6X/15w/+gCtGs3w4c+FdKP8A05Q/+gCtKgDN8Sf8irq3/XlN/wCgGvn7J9TX0B4mOPCern0sZv8A0A187/aG9BQArM288nr60Bj6n86bndz605RmgBck8E5pMD0FPjQM4BNS/Z19TQBR3t/eP51kahczpesqTSKMDgMR2rU3VzGtX8kOqyIqKQFXk/SgC4l1cMTunkP1Y1ZtJpWvIQZHILjILVh2l9JK7BkUYGeK0bKdvt0HA++KAOqr6D8N/wDIqaT/ANeUP/oAr5480+gr6H8MnPhPSD/04w/+gCgDTrF8Zf8AIia9/wBg24/9FNW1WP4wG7wProPfTrgf+Q2oA+SMn1NdvpkUbaTakopJiGSRXJfZE/vNXcaXbKNJtfmP+qFAF3T1CRuEAXJ7VW8Sc6FKDyNy/wA6nVzbcJzu55qnq8hudMeJwACy8j60AcgFXI+UdfSvRgowOB09K4cWSZHzN1ruAeB9KAGkDPSmSAEDIpXchsUx3JxQBHKo8puB0qlVyVv3L/SqO80Ae/8Ahz/kVtK/68of/QBWlWb4c/5FXSv+vKH/ANAFaVAGZ4m/5FPV/wDrxm/9FmvnevojxN/yKer/APXjN/6LNfO2R6igCdZVCgHPT0q5ZHzEfb2NZuCegrR0ziOTPHzCgBNUG3T3J9R/OsHeK39YP/Esf/eX+dc5mgA2GrcEDtCCMdfWoMe1aFoD9nXjuaAMzU7WQxR4A+8e/tVWxtpF1CBjjAcE81r6iP3cf+8aqW3/AB9xf7woA26998Of8itpX/XlD/6AK8Cr33w5/wAitpX/AF5Q/wDoAoA0qzvEP/Ir6p/15zf+gGtGs7xD/wAixqn/AF5y/wDoBoA8G2ms6adFndTnIbB4rUyPUVhXR/0yX/fNAGxpd3EsUmS33h29qk1C4jmsmSPO4kdR71maeR5b8/xVYlP7s4oApeW1Va0MH0rPoAyNQhd7xiuMYHf2p+nRtHJIW7rUt0D9obg9BRbA7m47UAWiwxTc0UlAH054U/5E3Rf+wfB/6LWtasnwp/yJmi/9g+D/ANFrWtQBn68pfw3qSr1a0lA/74NeJf2fP6L/AN9V7hrX/IBv/wDr2k/9BNeR0AYMmpW9vI0MpbfGdrYXPNcp4tmS+u7ZrfJCRkHcMd609TI/tW65H+tPesXUgWkj2gt8p6DNAD/B1vIPFEHT7j9/9mvRzA+D06etcH4RBXxNAWBA2PyRj+GvRCy7T8w6HvQB5ydfscn5pOv9ys67Q6hctc23MbAAbuDxx0rIJG489zW5pYJ09MAnk9B70AbXgrT5xe3fC/6pf4veupvrWWHT55HA2pGScGsrwbxeXW7j90vXjvXQ6wR/Yd7yP9S3egDi/tsPq35V9FeGWDeEtIYdDYwkf9+xXzJn3r6Z8Kf8ibov/XhB/wCi1oA1qzfEY3eFtVA6mymH/jhrSrP8Qf8AIs6n/wBecv8A6AaAPn/7NJ6D862ra0l+yxcD7o71Rx7VuWv/AB6Rf7ooAyb5TBIgk6kZGOaoXH76EpH94kda0db/ANfD/uH+dZ0f36AKgspsjhev96vQRE+B06etceAcjg9a7cdB9KAMu5jYTnp0Heua8Wwu1pbYx/rD39q6y5BNwcA9B2rnPFIP2W24P+sPb2oA5CK1lMyAAdfWr/2Gf0X/AL6pIAftEfH8QrToA968MKV8I6Qp6ixhB/79itSs3w7/AMivpX/XnD/6AK0qAMzxMdvhLVyegsZj/wCQzXzt9pj9/wAq+h/FP/In6z/14T/+i2r5soAz7qdDdy9fvHtUDXcUfDFufakuf+PqX/eNUbogMuSOnrQB0fhq7il16FELZKv1HtXb5rzjwgy/8JNB8w+4/f8A2a9FyPUfnQBkbhWddzotywOc4Har+D6GsfUDi9bPHA/lQBo6VIsssgTso6/WtqyU/b4P98VgaCf9Imx/cH866Gz/AOP6H/fFAHR16ZpX/IGsv+veP/0EV5pg+lel6V/yBrL/AK94/wD0EUAW6yvFALeD9YA6mwnA/wC/bVq1meJf+RU1b/rym/8AQDQB82fZJfQfnVlIXCKDjIHrU2R6j86WgChdQuWXp09al0qNk1FC2MYPf2p9wMsuPSn2AP2xeD0Pb2oA2NwpPtUfqfypMH0NVMe1AFe+Blu2dOhA6/SoUHlEl+/pViQHf0P5VDKCAMg9fSgBfNX3/Kjz09/yqE9KbQB9H+GjnwnpBHeyh/8AQBWnWX4Y/wCRR0f/AK8YP/RYrUoAyvFLBfB+ssegsJyf+/bV82fbYfVv++a+kfFv/Ila3/2D7j/0W1fLm4f3h+dAGut3EVHJ/KpYpkdTtzwfSstCNg5HT1q5ZkbG5HWgC/HIqyAmpvtEfv8AlVMEZ6ilyPUfnQBBtNcb4icJrkoPXav8q7WuH8TA/wBvzYB+4nb2oAi0+VBI/X7vpWrZTIL6Dr98dqw7AHzH4PT0rUtB/psP++KAOt+1R+p/Kvo/wud3hDRyOhsYD/5DFfMdfTXhT/kTdF/68IP/AEWtAGtWT4sUv4M1pV6tp84H/ftq1qzPE3/Ip6v/ANeM3/os0AfL/wDZ1x6L/wB9V1unoY9Nt0bqsYBrJwfQ/lW1bf8AHrF/uigBtwwDLn0qjfMDZsB6j+dW7r7y/SqN5/x6t9RQBm9x9a7LyzgfSuOwcjg9fSu2AOBx2oAqSIfMNQzMIlBfue1WpSBIcnFUr8gxpg/xUARvMjoVXOWGBxUHkP7fnSJ/rF+tWaAPdfDgx4W0oHtZQ/8AoArSrO8Pf8izpf8A15xf+gCtGgDJ8Vf8ibrX/XhP/wCi2r5nr6pu7WG+s5rS6TfBPG0ci5I3KwwRkc9DXM/8Kx8If9Aj/wAmZv8A4ugDx2z/AOPKH/cFSmvZU8AeGY0CJpuFUYA8+T/4ql/4QLw1/wBA3/yPJ/8AFUAeGar/AMg9/qP51g19HS/DzwvPGUl0zcp6j7RKP/Zqr/8ACr/B/wD0CP8AyZm/+LoA8Qq9a/8AHuPqa9n/AOFc+Ff+gX/5MS//ABVSJ8P/AAyi7V0zA/6+Jf8A4qgDw3U/9VH/ALx/lVK3/wCPqP8A3hXvsvw88LzACTS9wHT/AEiX/wCKpi/DbwmjBl0rBByP9Jl/+KoA8dr3nw7/AMivpf8A15w/+gCs7/hAfDX/AEDf/I8n/wAVW9b28VpaxW9uuyKFBGi5JwoGAMn2oAkrM8S/8inq/wD15Tf+gGtOorm2ivLSa2uV3wzI0ci5I3KRgjI56GgD5rrMn/4+JP8AeNfQ3/CuvC3/AEC//JiX/wCKqJvhl4RZizaRknr/AKTL/wDF0AeBW/3W+tXLT/j5X6Gvcl+GnhJPu6Tj/t5l/wDiqenw58KxtuTS8H/r4l/+KoA8brCr6F/4QDwz/wBA3/yPJ/8AFVB/wrTwl/0Cf/JmX/4qgDwA9aaa+gf+FZ+Ef+gT/wCTMv8A8XSf8Ky8I/8AQJ/8mZf/AIugD58f7jfSq1fRh+GPhAjB0j/yZm/+Lpn/AAq3wd/0B/8Ayam/+LoA1/Cf/Il6J/2D4P8A0Wta9Q2lrDY2UFpap5cFvGsUaZJ2qowBk8ngVNQBR1v/AJF/UP8Ar1k/9BNePV7ZPDHc28kEy7o5VKOucZBGCKxv+EN0H/nx/wDI0n/xVAHzLrP/ACHL3/rs1aHh/wD495/98fyr3mb4W+Drid5ptH3SSNuY/aphk/8AfdSW/wANPCVqrLBpOwMcn/SZT/NqAPGR1pT90/Q17V/wr/wx/wBAz/yYl/8AiqX/AIV/4Z/6Bn/kxL/8VQB8fHqfrXoPhL/kW4P99/8A0Kvav+FM+Av+gD/5OT//ABdaFp8NvCdjbLb2uleXEpJC/aZT1+rUAeSW/wB5vpTdT/5BN1/1yNeyr4E8Np93Tsf9t5P/AIqiXwH4bmhaKTTdyOMMPPk5H/fVAHzJX1L4R/5EnQ/+wdb/APotax/+FVeDP+gN/wCTU3/xddTaWkNhYwWlonlwW8axRJknaqjAGTyeB3oAmqhrv/Iu6j/16y/+gGr9RzwR3NvJBOu6OVCjrnGQRgjigDw2tGH/AFKf7tekf8IV4f8A+fD/AMjSf/FVIPCWiKoAsuB0/ev/AI0AeQax/rov90/zqna/8fA+hr2abwT4fuGBm0/cQMD99IP/AGamL4E8OI25dOwf+u8n/wAVQB5XXS12f/CFeH/+fD/yNJ/8VVn/AIRvSv8An1/8iP8A40AcOn3awfFv/Hpbf9dD/KvVx4d0sdLX/wAiN/jUF34Q0O+RVurHzAhyo85xg/g1AHhA+8KfXtX/AAr7wx/0DP8AyYl/+Kpf+Ff+Gf8AoGf+TEv/AMVQBo+Hf+RX0r/rzh/9AFaVR21vFaWsVtbrsihQRouScKBgDJ9qkoAyvFP/ACJ+s/8AXhP/AOi2r5sr6juraG9s5rW5TfDPG0ci5I3KwwRkc9DXNf8ACtPCX/QJ/wDJmX/4qgD5fvP+P2b/AHzWDrf+vh/3D/OvrZ/hJ4JkdnfRcsxyT9rm/wDi6rz/AAX8AXLAzaDuKjA/0ycf+z0AfLngn/kbLf8A3JP/AEGvT69Xsvg54E067W5s9C8uZQQG+2TnGeDwXxWp/wAIB4Z/6Bn/AJHl/wDiqAPIq47xF/yG5f8AdX+VfSP/AAg3h3/oHf8AkeT/AOKqncfC/wAH3c5muNI3yEAE/aZh/J6APBPCn/H1c/8AXMfzrsNO/wCQnbf9dBXp1p8NPCVi7Na6TsLDBP2mU5H4tVuPwV4filWSPT8MpyD50nB/76oA5Wu/07/kF2n/AFxT/wBBFVv+Ef0z/n2/8iN/jWhHGsMSRxjCIoVRnoBQA6srxV/yJ2s/9eE//otq1aiurWG9s5rW6TfBPG0ci5I3KwwRkc9DQB8r1fi/1KfSvc/+FZeEf+gR/wCTMv8A8XUg+HHhRVAGlcD/AKeJf/iqAPFLX7rfWrtp/wAfK/Q17Cvw98MJnbpmM/8ATxL/APFU9PAfhuNtyadg/wDXeT/4qgDyuqVey/8ACF6B/wA+H/kaT/4qmf8ACC+HP+gd/wCR5P8A4qgDyOP7gqnqn+qj/wB4/wAq9pHgfw8Bgaf/AOR5P/iqZL4C8NTACXTdwByP38n/AMVQB4JL/qX+lUK+hT8OfCrKQdK4PX/SJf8A4qo/+FZeEf8AoEf+TMv/AMXQBreFf+RO0b/rwg/9FrWrUVraw2VnDa2qbIII1jjXJO1VGAMnnoKloAxPGv8AyIPiD/sGXP8A6KavkCvtO9s4NR0+4sryPzLe5iaGVMkbkYYIyORwe1ch/wAKd8Cf9AL/AMnJ/wD4ugD5sh/1Cf7taenf6uT/AHhX0Ivwl8EqoA0XAHT/AEub/wCLqWP4W+DogRHo+Aev+lTf/F0AfP03+qNVq+jG+GPhBhg6Rx/18zf/ABdM/wCFW+Dv+gP/AOTU3/xdAHhdc9q3/ISf6L/Kvpv/AIVt4T/6BX/kzL/8VVab4T+Cp5DJLou5j1P2qYf+z0AfMcfU1Ztv+PqL/eFfSI+EfggdNE/8m5//AIunL8J/BSMGXRcEHIP2qb/4ugDwWvpbwr/yJ2jf9eEH/otayf8AhWXhH/oE/wDkzL/8XXTWtrDZWcNrapshgjWONck7VUYAyeegoAlrP1//AJFvU/8Ar0l/9ANaFR3EEd1bS2867opUKOuSMqRgjigDwOpB90V65/wg3h3/AKB3/keT/wCKpf8AhB/D3/QP/wDI8n/xVAHjF599fpVavbn8B+G5CC+m5x/03k/+Kpn/AAr/AMMf9Az/AMmJf/iqAPE+4+tdeOgrvf8AhX3hj/oGf+TEv/xVXP8AhE9F/wCfL/yK/wDjQB4nrH/ITk/3V/lVE17jN4E8OTymSXTtznqfPkH/ALNTP+FfeGP+gZ/5MS//ABVAHikP+vT/AHq0a9aX4f8AhlWBGmcjp/pEv/xVS/8ACD+Hf+gf/wCR5P8A4qgC/oH/ACLem/8AXpF/6AK0Kjt4I7W2it4F2xRIERck4AGAOakoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKGu/8AIu6l/wBekv8A6Aa8Wr2vWgG0HUAehtpAf++TXkf2WL0P50AcLf8A/ISuP+uhrY8N/wDHtcf74/lWVqahdWugOglOK0/Dxxbz4/vj+VAGlqH/AB5N9R/OsitLUnYWLkeo/nWL5z+o/KgCSp4/9WKyvtUvqPyq1DcSGIEkflQBU8Rf8e8H++f5Vg1u6qfPijEnIDEjHHasmWFEhdlByBkc0AV6+rPB/wDyI+hf9g63/wDRa18mea3r+lfWXg458C6Cf+obb/8AopaANmsrxT/yJ+s/9eE//otq1azPEw3eEtXB6GxmH/kM0AfNNbdt/wAekX+6Ko/ZovQ/nV+L5YUUdAMCgCpqH+sT/dqC3/1w+lS6iT5kf+6ahtjm4GfQ0AXaq1bxUGxaAN/R/wDkFx/7zfzrXsv9Y/0rK0lQNNTHq3860YXMbEr3FAFu5/49Jf8AdNYlaU87m3kBI+6e1ZW40Ae16F/yLunf9esX/oAq/VDQf+Rc03/r0i/9AFX6AMzxJ/yKmrf9eU3/AKAa+fK+g/Ev/Iqat/15Tf8AoBr57zQBA/32+tbWgf8AHvN/vj+VcZd6lcx3syIy7VcgfLW34b1G5e2uNzL98fw+1AHYR/6wVMehrM066lmvkSQgqQeg9q2Ci4P0oA4zufrSGoDM+TyOvpUT3MgcgEflQB2Hgr/j9u/+uS/zrs4v9cn1rz7wZdyi9u8Ef6pe3vXZ2l1K95CrEYLgHigDdrqbT/jxg/65r/KuYxXT2n/HlB/1zX+VAE1UNd/5F3Uv+vSX/wBANX6oa7/yLupf9ekv/oBoA8VqhL/rn+tX6pyKDK31oAzb376fSo7f/Xj6Gl1VjHLGE7qf51Vt5n88cjoe1AGrXUDoK48TPkcj8q6rzWwOf0oA5zXP+QtJ/ur/ACqgKv6x82pyE9dq/wAqonjpQBo6B/yMmn/9fC/zr1qvHtKlaLWLSROGWVSMiu9/tq9/vp/3wKAPUbP/AI8Lf/rkv8qmqppTtJo1k7/ea3jJ+pUVboAzfEX/ACK+q/8AXnN/6Aa8Dr3fxbI0XgvW5E4ZNPnYZ9RG1fL/APb1/wD30/79igCe8/4/pv8AfNT2H3H+tZL3csrmRyCzHJ4rc8PRLc287TclXAGDjtQBatf+PgfQ1fojtIkcMoOfrU3lL6H86AL1cpr3/IYk/wB1f5Vqf2jcf3l/75rmdavZm1WQkjO1e3tQBnaz/qYv94/yqPw5/wAjPpv/AF8p/OrcMS6gxS6+YIMjacc1reHdHsx4m035H/4+E/jPrQB6FXrGjf8AICsP+vaP/wBBFcN/ZFp/cb/vs13unII9LtUX7qwoB9NooAs1m+JP+RV1b/rym/8AQDWlWZ4lOPCerH/pym/9ANAHgFFQea3r+lL5jf5FAGnYfcf61fg/1wrFtriRFbaR19Kn+3Tp8ysuf92gDc7H6Vxvc/Wtb+1Lr+8v/fIrF3mgCYdK19A/4+Jv9wfzrGQkrWz4e5uJ8/3B/OgDUv8A/kHXH/XM1ytdZqAA024/65muRzQB9F+Gf+RS0j/rxh/9FitOsvwz/wAilpH/AF4w/wDosVqUAZfif/kUdY/68Zv/AEWa+c6+i/FJx4P1kj/nwn/9FtXzb5r+v6UAZdz/AMfcv+8auaZ/qpP94fypHt43kZmByxyea2dC062lgmLqxw4/i9qAKUn+rNQ1v32m20VmzorAgj+L3rK+zx+h/OgC1Ui/dqOoJbiSOQqpGPpQBPP90fWq0/8AqH/3TVS+v5440KsvJ/u1UXULiVwjsu1jg/LQBJX034U/5EzRf+wfB/6LWvmbaK+mfCv/ACJui/8AXhB/6LWgDWrO8Qf8izqn/XnL/wCgGtGs7xB/yLOqf9ecv/oBoA8KpKWs+a7lSZ1UjAOBxQAzVf8AWx/7p/nWdJ/qzUt9cSSSJuI4HpUdsPPnEcnKkHOOKAK46iupHQVl/YLf+63/AH1V/e1AFyP/AFYrM1//AI94f98/yqG51K5gnMcbKFAGMrmszVNSuZoow7KQGOML7UAVb/8A5B9x/wBczXK10RlecGKQgo/ysAMcUz+yLT+43/fZoA+pvBH/ACT/AMPf9gu2/wDRS1uVj+EEEfgjQ0X7q6dbgfTy1rYoApaycaFf/wDXtJ/6Ca8m8weles60caBqBPT7LJ/6Ca8f82P++v50AcbqnOr3Z/6atVzRbhYIZQwJywPH0qnqXOqXJHIMp5qSwIWN9xxyOtAGne3Kz2rRqpBJHJrM8o+oq0xDLhSCfQUwo2D8p/KgDn/t8f8Acar1rcq9uCFPU1hY5P1rTsmAtFBIBye9AFu4X7SqheNpzzVK7tWSzmYspCoTV2JgScEGmX4zp1wB/wA8zQBy+8elfW3g3nwHoH/YNt//AEUtfJHlv/cb8q+t/BnHgPQM/wDQNt//AEUtAG1WZ4l/5FPVv+vKb/0A1p1meJv+RT1f/rxm/wDRZoA+ed4q2jfu1+lUc1aRl8tfmHT1oAq6icyJ/umq8UoikDsCQPSpr9gZEwQeKqHkcc0AXP7Qj/uN+lS5rM2t/dP5VoeYn95fzoA6DS5gunoCD1P86vxTBicA9KyNOdfsS/MOp7+9aFuwLNgjp60AWJXBhce1UMVclYCJiSAMetUfNj/vr+dAHtug/wDIuab/ANekX/oAq/VDQTnw5ppHI+yRf+gCr9AGZ4l48J6v/wBeM3/oBr543ivobxN/yKWr/wDXjN/6LNfO2D6UAcnqF2q6lcja3EhrY8N6hGltPlG5cenpXPakD/at1x/y1NaOgsFgm3ED5x1PtQB3Oh3yTatGiowJVuT9K6kng/SuH8NOh16EBlJ2v0PtXbEjB+lAHBFDk/WqF1crDcMjKxIA6VpkHJ471h6mQL9wSAcD+VAHTeDtQjW8uso3+rHp612mn6hG+pW6hGBaQDtXnXhKRFvLnc6j92Op967PSpYzrFoBIpPmr/FQB6BvFdRaf8eUH/XNf5Vye5fUfnXWWf8Ax4wf9c1/lQBNWfr52+G9TPpaSn/xw1oVneIf+RY1T/rzl/8AQDQB4j9pX+6arvKC5OD1pMVEzqGILAHPrQBm6zMBNFwfun+dUredfPHB6Gp9ZO6aLbz8p6fWqMAImGeOKANP7QuRwa68HgfSuIyMjkda7cdB9KAMjULN5r1nVlAIHX6Vm3kLWiKzkNuOBit6cHzjx2rH1w7YId3Hznr9KAK9hcKuo25KniQV1f8AaMf9x/0rirFlN/AAwJLjABrp9j/3W/KgD3HRG3+H9OYdGtYj/wCOCr1Z+gceG9Mz/wA+kX/oArQoAxPGjiPwD4gc8hdMuSf+/TV8h/2rF/zzf9K+uvHALfD3xEFGSdLuQAO/7pq+Nfs0/wDzwk/74NAHY2mkTXdlDcJIirKgYA5yM103hvRporacGWM5cdM+lVtEsbs6BYkWsxHkL/yzPpXR6RG9vDKLhGiLMCA425496AIbm0e0tzM7KyqQML15ql9tT+61autSxjSpCZFA3L3965rz4f8AnrH/AN9CgCt/aMf9x/0rLvYTd3bTIQqsAMN14FSbW/un8qljhlZAVicj1CmgB2i6RNcTyhJIxtUHnPrXSaNok1trllO8sbLHMrEDOTVTw3FIlzPvjZfkHVcd66a2Pl3UTv8AKqsCWPAFAHWfa0/utXcaed2m2xHeFD+grzT7fZ/8/cH/AH8Fek6WwfR7NlIZTAhBB4I2igC1WX4oO3wjrBPaxnP/AJDNalZPir/kTda/68J//RbUAfOX2tP7rVZT50Vh0IzWXWnB/wAe8f8AuigCaM7Qc025uFggMjAkAjgU5eelVtS4sHzxyP50ARf2tF/zzf8ASm5rK3D1FaeRQBZiQtGDWvobCCeYtzlAOPrWZbKTACASMntWhp52SPv+XKjrxQBqX90rafcKFbmM1yua37uRDZzAOpOw965/IoA+jfDH/Io6R/14w/8AosVqVl+GP+RR0f8A68YP/RYrUoAy/FA3eENYHrYzj/yG1fN/2Zv7wr6R8SjPhPVgOT9im/8AQDXzz5Un/PNvyoAgGnSMoIdefrW5oFi6W82XU/OP5VWjik8tf3bdPStfSCIoZRL8hLDG7jPFAEWrwNFpjuSCAy9PrXO7xXTa9LH/AGPJ+8T7y/xe9cn5sf8Az0T/AL6oAk+3J/caqVzfJ55+Rugpu9P7y/nVS4+aYleRgcigAvLlZkUKpGD3qKzUzXsMa8F3ABNNaN3+6jN9BVjTIJhqtrmJ/wDWj+E0Abf9jTf89Y/1r6K8MoY/CWkIeStjCCR/1zFeIeVJ/wA82/KvcvD4x4a0wHg/ZIv/AEAUAaFZviNtvhbVWPaymP8A44a0qy/E3/Ipav8A9eM3/os0AeCfbk/uNWZPdKbiQ7W+8alyPUVRlBMz4HegBtxKHYEA8CpdOG++QD0P8qrsrHop/KrWlqw1BCQQMHt7UAa/kt6im7xVjNU8j1oAz745u2+g/lVG5hM6qFIGDnmrt4M3LY54FRLG7H5UZvoKAKUVg/nJ869avfYJP76/rT44ZRKpMbgZ/umru1vQ/lQB9C+Fl2eDtGU9RYQD/wAhrWrWZ4a/5FPSP+vGH/0AVp0AZ+v/APItan/16S/+gGvDq9u8Skr4U1Yg4IspiD/wA189/ap/+erUAQXX/H5L/vmmp0NOb52LNySck1PbxoVbKg80AFp/x8r9DV89D9KgijRZAVUA1P2P0oA4Y9T9asw/6oVHtGTx3qWMYQYoAuWX33+lTXX/AB6S/wC6aq25IZsHHFWMl/lc5VuCD3oAxa+qfCH/ACJGh/8AYOt//Ra184/Y7f8A54rX0j4XAXwfo6qMAWEAA/7ZrQBq1l+Jv+RS1f8A68Zv/RZrUrJ8VEjwbrRHBFhP/wCi2oA+d6Ws7z5f75q3G7GNSTzigBtz95fpUcX+sFSS8kZ5ohUeaOKAJKrVe2j0qvtX0oA1dN/48E+p/nWnZ/fb6VgwSvHCFRiB6Cr1jPL5j/OelAGtc/8AHpL/ALprEq/JLI0bAuSCORVXaPSgD3rw5/yKulf9eUP/AKAK0qzvDv8AyK+lf9ecP/oArRoAzPEv/Ip6v/15Tf8AoBr55r6I8QjPhjVAehs5v/QDXg/kRf3BQB53qX/IVuv+upp9j9x/rWjqNtCdTucxr/rDVby1j4jUKD1xQBueEf8AkZYP9x//AEGvQ+x+lec+EyR4kg5/gf8A9Br0DcfWgDk+5+tcxrX/ACFpP91f5V3H2eL/AJ5iuS1+JBrMoCgDav8AKgBvhz/j5n/3B/Out0X/AJD1j/13WuR0o+XLJ5fy5UZx9a6DRZpP7esfnP8Ar1/nQB6zXaWP/IOtv+uS/wAhXn3nSf3zXf6ac6VaE9fJT/0EUAWazvEH/Is6p/15y/8AoBrRrP8AEH/Itan/ANekv/oBoA8JrLn/AOPiT/eNbG0elYV0xF5KAf4zQBWu/vr9KrirEnzEbuaYFGelADB1H1rvR0H0rh9o9K6L7TP/AM9WoAvyf6w1geKf+PW3/wCuh/lWmJZGGWck1la+S9vDv5+c9fpQBkaT/wAhm0/66rXf1w+kIv8AbVnwP9cteheUn90UAes6J/yL+nf9esX/AKAKvVS0YY0GwA/59o//AEEVdoAx/F3/ACJOuf8AYOuP/RbV8tZr6t19Fl8NanHIoZGtJVYHuChrw7+xdM/58ovyNAHTeHCf+EY03/r2T+VV9e5uIf8AcP8AOtrS7eKLSbVI41VFiAAHYVyHj+5mtNQsltpGiDQsSF7/ADUAZviD/kCy/wC8v864+rt9f3U1oySzu6kjIP1rL3tkcmgDZrY0/wD48l+p/nTfssGB+6WrlvGiQgKoAyeKALmm/wCsk/3R/OrV7/x4T/7hrEvZ5bVENvI0ZY4JXvWbe6nffYZ/9Kk+4e9AE+B6V9B+G/8AkVNJ/wCvKH/0AV8o/wBp3v8Az8yfnX1T4QZn8EaGznLNp1uST3PlrQBsVk+Kv+RN1r/rwn/9FtWtWT4q/wCRN1r/AK8J/wD0W1AHzPWlD/qE/wB2s2raOwjUBj0oAvw/dP1qrrH/ACC5P95f51asfnjfdzzUOtqBpMmB/Ev86AOYrXrHrU3H1oA29P8A+PJfqf51NJ0FTaJFG+kxs6Anc3J+tJrCiGGIxDYSxBx9KAKk3+of/drOp800nkv856Vn+bJ/fNAH074X/wCRQ0f/AK8YP/Ra1qVk+FDnwbopPX+z4P8A0Wta1AGf4g/5FrU/+vSX/wBANeG17prYB8P6iDyDay5/74NeOfZ4v+eYoAjj/wBUv0qKf7y/SopZHSZ1RiFBwAO1ZOq3lxHNGI5mUFTnH1oAl17/AJA8n+8v865Sr2oXtzJZsskzMpI4P1rI3t/eNAE9Sp92rXkx/wBwVahtoTECY1NAFax/1j/StTTz/wATK3/66CnWVrBvf90vSr8MESToyxqGDZB9KANyvX9F/wCQBp//AF6x/wDoIrxbzH/vGvZ9COfDunZ/59Yv/QBQBfrL8Uf8ihrH/XjP/wCizWpWX4n/AORR1j/rxn/9FmgD5wph61LirKQxmNSUBJHNAFIVYs/+PpfoaJ40RhtUDipLBQbxcjsf5UAXqoVr+Wn90Vm7V9KAKM3+tNWdN/1sn+6P51WuuLg49BV3RVDzS7hn5R/OgC2x+U1DV64jVbaQqoBCnBrI8x/7xoA+iPDn/Iq6V/15Q/8AoArSrM8NHPhPSM/8+MP/AKAK06AMzxN/yKer/wDXjN/6LNfO2K+ifE3/ACKer/8AXjN/6LNfO9ABt96vWFr5sbnfjB9Ko71HBNamkupik5/iH8qAHyWvkoX35x2xUO6rl06/Zzz3FUNw9aAOa+x/7f6U4QbRjd+lS+Yn96gfNyvIoAiJ8jn72eKkt5vNuo49uNzAZz0pk6MVXA70tjE/9oQfL/y0FAG19h/6afpX0F4bXZ4V0leuLKEf+OCvC/Jk/uGvdfD4x4Z0sHqLOL/0AUAaNZPiv/kTNa/7B8//AKLatasnxVz4N1rH/PhP/wCi2oA+ZMVOk21AMdB61H5belHTg9aAHvNkj5f1qS1ffcKuMcGq556VPYg/a1+h/lQBo+X71Q3+1aVZdAFmN/3Y4q3ZybXfjtVGNgEGTVqzILtj0oA0BJvIXGM8Zp/2f/a/SooEZ7hFUZYtgCtP7Bc/88W/MUAez+HxjwzpY9LOL/0AVoVQ0JSnh3TlYYItYgR/wAVfoAoa6u/w7qS9N1pKP/HDXi39nD/nqf8Avmva9ZBbQr8Dkm2kA/75NeTfZZv+eZoA4O/0kHUbg+cf9Yf4azLyxEDqPM3ZGeldXeafdG+nIhbBc9xWJq9rPFNEJIypKnH50AM8NL5WvRPnOFfj8K7f7T/s/rXGaEjJrEZYYG1v5V1e4etAFn+zB/z1/wDHa5LXtJB1mU+cfur/AA+1egfZZ/8AnmfzrmNb0+6fVpCsLEbV7j0oA5u2sBbsx8zdkY6VqaQmzWrNs5xMppDp90n3oWH4irGm20yapbO8ZCrKCT6UAd55/wDs/rXo+lnOkWZ9YE/9BFeYean96vTtJOdFsiP+feP/ANBFAFus/X/+Rb1P/r0l/wDQDWhVDXv+Rb1L/r0l/wDQDQB4fs96528OL2Yf7ZrpcGubvVP26fj+M0ARLH5nOcYoMO0Z3Z/CpraGR1bapPNPlglWMkoQKAKmK0Ptx/55/rVPy3/u0nmp/eoA2IJvMhDYx7ZqlrI3wxdsMf5VNaTRi2X5u5qLUT50cYj+YhjmgCjpw8rVLaTrtkBx612X9pn/AJ5f+PVyFsjRXUTyDaqsCT6Ctn7fa/8APZfyNAHvmhtv8Pac2MbrWI4/4AKvVneHWD+F9LZTkGzhIP8AwAVo0AVNWj83Rb2PON9vIufTKmvMP7AH/Pyf++P/AK9eo6icaXdZ/wCeL/8AoJrg/MX1oAyf7bNh/ogtw4g+Tdvxux3xXC/EDXjNqFkfswGIW/j/ANr6VsanrGnxatdRyXKq6ykEYPBrjPF1xFf3lq1m4lVIyGI7HPvQBRt7z+0JxblPL3AndnOMVd/ssZH74/8AfNZ+iW0z6tGFjJO1uPwrp/sFz/zxb8xQBq/Zv9v9Kqz3xtJjCI9+3nOcdaufaYf+egrA1W/tl1Fw0yg4HY+lADdY1opDF+4B+Y/xe1ZLaublTAYAvmDbu3ZxSanNHdRRrbuHKsSQO3FU7S1mkvIUSMszOAB6mgCf7D/00/Svqjwgu3wRoa9cadbj/wAhrXzh/Ympf8+j/mP8a+kvCyNF4P0aOQbXWwgVh6ERrQBq1keLW2eCtbbrjT7g/wDkNq16xvGJC+BdeJ4A024J/wC/TUAfL/28/wDPP9anTUDsH7vt61j/AGqH/noKspNGY1IbtQB0ukXPnQynbjDDv7Ua7JjSJOP4l/nVXQ5oxBNlv4x/KpNblR9JkCtk7l4/GgDm/N9v1rR+0f7P61l4NWvOj/vCgD0Dw1B5+gwybtuWfjHvVfxUPsdrbMPn3SEemOKteEp4/wDhG4PnH33/APQqqeM2EtnaCM7iJWz+VAHMS337l/3fb1qh9tP/ADz/AFqWdGW3dmGAF5NZvnx/3hQB9Z+EW3eCdDbpnTrc/wDkNa2KxvBxz4F0EjodNt//AEUtbNAFDXW2+HdRbri1lP8A44a8Y+2f7H617L4idY/C+qu5wq2cxJ9BsNeB/wBsaf8A8/K/kf8ACgCG61UrdyjyQcMf4qyNU1IySxnysYU/xe9PubiKS6ldHBVmJB9ao3UT3DKYF3hRg47UARtP9pXytu3POc5pn2P/AG/0qW2sLppwBCxOD3FXv7NvP+eDfmKAND+yRj/XH/vmpksAiBfMJ/Crwhkx92ondY3KucMO1AEG37J8w+fdx6YpRflDu8vOOcZqG/u4I40LyAZPHFUW1C1KnEy9PQ0Aa39uH/n3H/ff/wBavfPDj+b4W0qTGN1lC2PTKCvmf7bb/wDPUfka+lfCzBvB2jMpyDYQEH/tmtAGrWZ4kXd4U1ZembKYf+OGtOs7xCM+GNUA6/Y5v/QDQB89fYf+mn6VKsexQuc44qz5Mn92omUhiCKAGfYhc8mTbt46ZqSCwFvMJPM3YzxirFpG7I21c81LKphjLyDao6mgBmaw/t3/AEz/AFrX+0w/89BXPbT6UATsv2hvM+7ntWho8WyaXnPyjt71SgjYwjA71o6b+6kkMny5UYoAu3K/6LL/ALprE2+9bNzNH9ll+b+E1i+dH/eoA+ifDP8AyKekf9eMP/oArTrM8MnPhLSCOn2GH/0WK06AMzxN/wAinq//AF4zf+izXzvX0P4o/wCRQ1j/AK8Z/wD0W1fN2T6n86AJG+8a1NI/1Mv+8P5Vzzsd7cnr61as3cI2GYc9jQB0N1/x7n6iqNQROzSAFmI9CasUAc5VmH/VCqea0rMA2q5Hc0ARSdBUlgf+Jlb/APXQVetkUs2VU8dxWhYxp/aEHyL/AKwfwigC9mvatC/5FzTf+vSL/wBAFeYeWn9xfyr1LSONEscf8+8f/oIoAuVleKf+RP1n/rwn/wDRbVq1neIhnwvqgPP+hzf+gGgD5pzVd/vn610vlp/cX/vkVjXKgXUuAPvHtQBTFWbL/j6X6Gq8/DLjjiptM51BM+h/lQBq1lVu4GDwK5cscnk/nQBeXpVvT/8AWP8A7oqpa824zzya2dEVTPNkA/IOo96ALFj/AMhC3/66CuqrKtkUXUWFX7w7VtYHpQB6VpP/ACBbL/r3j/8AQRVuqulf8gez/wCuCf8AoIq1QBV1T/kD3n/XB/8A0E15vXpOpf8AIKu/+uL/APoJrz/aPQflQBzlyf8ASpf941zXiQ/6Tb/7h/nXobRoWOUX/vkVzPimNPtVv8i/6s/wj1oA5XSf+Qkn0b+VdD3H1qlaIouVIVQcHoK0Mcj60Adl2H0rB1T/AJCD/QfyroOw+lULtVNy2VB4HagDnbn7q/Wo7Y/6VF/vCtuaNNo+RevpUQRAQQq5+lAD69W0f/kB2P8A17R/+givKq9V0f8A5Adj/wBe0f8A6CKALlUNd/5FzUv+vSX/ANANX6paz/yAb/8A69pP/QTQB4nXO3n/AB+zf75rs9i/3R+Vcnfgf2lccf8ALQ0ALp/+rf8A3hU1z/x7n6in6WB5UnA+8O3tVi6UfZzwOo7UAY1Zlb20eg/KsOgC9af8e6/U1K1RWv8Ax7j6mpaAI5P9W30qpV2X/Uv9Ko0AfSnhb/kT9G/68IP/AEWtatZXhb/kT9G/68IP/Ra1q0AVtT/5BN3/ANcH/wDQTXnmK77Wzjw/qBHB+yy/+gGvHvNk/wCej/8AfRoA4TxCP+Kl1H/r4b+dZMvDDPpVfX5JP+Ej1D52/wCPhv4j61qeGFEtrcGUByJBjcM44oAk8On/AInkX+638q7Ks7TYo1vkKxoDg8hR6VtkDB4HT0oA57B9K5bXP+QtJ/ur/KnGaXJ/ev1/vGqNyxa4JYknA5JoAdb/AHm+lamkH/idWf8A12Wo/Dqq9zPvUN8g6jPeup0yGP8AtW1/dp/rR/CKAN3NeyaH/wAi9p3/AF6xf+gCvM/LT+4v5V6fpPGi2WP+feP/ANBFAFusTxr/AMiB4g/7Blz/AOimrbrA8enHw38S44/4lN1/6JagD5CxWhD/AKlP92uR8x/77f8AfRrr9P5022J5Pljk0AbGjf6mX/eH8qn1L/jwf6j+dO0QDyJuB98dvan62ANJkwMfMv8AOgDn6jpmT61XyfU/nQB6Z4S/5FuD/ff/ANCpPE3/AB7W/wDvn+VY/hyRxocWHYfM3f3q/cEuq7yW5/i5oA5+9/48Zv8AcNc3XaaiqjTLnCj/AFZ7Vx2KAPrrwX/yIPh//sGW3/opa26xfBf/ACIWgf8AYMtv/RS1tUAZHi3/AJEnXP8AsH3H/otq+W6+ovGP/Ii69/2Dbj/0U1fJ25v7x/OgDSB4FXLIjY/1rU02KNtLti0akmMZJUc1safDF5b/ALqP7w/hFAGJZH/S1+h/lWpmtRYYg2REgPsopxRMH5V/KgCtism/H+mN9B/KoTI+fvt/30ax9Rkk+3N87dB/EfSgB+t/6mH/AHj/ACrHpNSkcxx5dj8x71UtmJu4gSSNw70AXa+qvCH/ACI+hf8AYOt//Ra18x7V/uj8q+nvCf8AyJeif9g+D/0WtAGtWfr/APyLepf9ekv/AKAa0Koa9/yLmpf9ekv/AKAaAPEKqSf6xvrV/FUpP9a31oAt6d/q5P8AeFLqn/IPf6j+dUlYr90kfQ1W1R3/ALPf5m6jv70AV6qVV3t/eb860MD0oAsWv/HuPqasw/eP0qnHwnFSKT6mgCzc/wDHrL/umsStCYnyH5P3fWs6gD6T8Lf8ifo3/XhB/wCi1rVrK8Lf8ifo3/XhB/6LWtWgCvf2ceo6bc2U5ZY7mJ4XKHDAMCDjPfmuJ/4U9oH/AD+al/39j/8AiK76igDz4/Bnw8ST9s1Pn/prH/8AEU+P4PaBECFvNSOfWWP/AOIrvqKAOFX4S6EjZF3qOf8Aron/AMRUn/Cq9E/5+tQ/7+J/8RXbUUAed/8AClPDn/P7qn/f2P8A+N1PF8H9AijCLeakQPWWP/4iu9ooA4eP4T6HGSVu9Q59ZE/+IqaL4Y6NDMki3N+ShyMyJ/8AEV2VFAHOf8ITpv8Az3uv++1/+Jrft4FtrWKCMkrEgRS3UgDFSUUAFQ3lql9Yz2kpYRzxNExU8gMMHHvzU1FAHGf8Kv0X/n6v/wDv4n/xFVX+EGgSSM5u9SyxycSx/wDxFd7RQB58/wAGfDzkE3mp8eksf/xFOg+Dvh+3mEiXmpFhnrLH/wDEV39FAHF/8Ku0X/n6v/8Av4n/AMRVD/hSvh3/AJ/dU/7+x/8AxFeh0UAcDH8HtAjQKt5qWPeWP/4irVr8LdFs3Zorq/JYYO6RP/iK7SigDlk+H+lRyK4uLzKnIy6//E1Z/wCEN0//AJ7XP/fS/wDxNdBRQBHbwrbW0UCElY0CAnrgDFSUUUAMniWe3khckLIpUkdcEYrH/wCEVsf+etx/30v+FbdFAGGfCdif+Wtx/wB9L/hVC/8Ah5pOoyI89xeKUGBsdB/Na6uigDjI/hfosbhlur/PvIn/AMRUv/Ct9I/5+b3/AL+J/wDE111FAGL/AMItZf8APW4/76X/AAqGTwdp8jlmmuc+zL/8TXQUUAc43gjTW6z3X/fa/wDxNN/4QXTP+e93/wB9r/8AE10tFAHN/wDCDab/AM97v/vtf/ia6C2gW1tYreMkpEgRS3UgDFSUUAFRXNut1aTW8hISZGRivUAjHFS0UAcz/wAIHpn/AD3u/wDvtf8A4ms6b4U6HPO8r3WoBnbJxImP/QK7eigDjIPhdoturBLq/O45OZE/+Ip8nw00eRCrXN9j2kT/AOJrsKKAOK/4VXon/P1qH/fxP/iKp/8ACmvD3/P5qf8A39j/APiK9BooA4SP4RaDGgVbvUce8sf/AMRTv+FS6F/z96j/AN/E/wDiK7migDhW+EmhMpU3eo4I/wCeif8AxFRf8Kc8P/8AP5qX/f2P/wCIrv6KAK9hZx6dpttZQFmitoUhQucsQoAGcd+KsUUUARXVul5ZzW0pYJNG0bFeoBGDj865n/hXmk/8/F5/32n/AMTXV0UAeZ3nwI8M3t7NdS32rB5nLsFmiwCfT93VnT/gt4d02N0gvdUYOcnfLGf5JXodFAHFw/C3RIJRIl1fkj1kT/4irP8AwrvSf+fi9/77T/4murooA83/AOFH+G/+f7Vf+/0f/wAbqN/gR4YdtxvtWz7TRf8AxuvTKKAPO7H4KeHLCR3hvdUYuMHfLH/8brQg+FuiW9xHMl1flo2DAGRMf+gV2lFAHPf8IXp3/Pa6/wC+1/8Aia3beFba1igQkrEgRSepAGKkooAKp6vpsOtaJfaXdNIkF9byW8jRkBgrqVJBIIzg+hq5RQB5B/wzX4P/AOglrn/f+H/41WnD8CPDEECRJfasVRQoJmiz/wCi69MooA8/tfg34ftFZY7zUyGOTulj/wDiKddfB3w/eW5hkvNSCsQSVljzx/wCu+ooA8y/4UN4Y/5/9X/7/Rf/ABumf8KB8Lf8/wDrH/f6L/43XqFFAHA2Xwe0CxtVt4bzUiikkFpY88/8AqZvhRobdbvUP+/if/EV3FFAHBTfB/QJ4Hie81IK6lSRLHn/ANArM/4UF4X/AOf/AFf/AL/Rf/G69QooAq6Zp8Wk6RZ6dbs7Q2cCQRtIQWKooUE4xzgVaoooAranYRarpN3p9wzrFdwPA7IQGCspUkZzzg155/wojwx/z/at/wB/ov8A43XplFAHDwfCjQ7e3jhS71ArGoUEyJn/ANAqzD8NtHgUhLm+OTnmRP8A4muvooA5X/hXulD/AJeLz/vtP/iaP+FfaV/z8Xn/AH2n/wATXVUUAcN/wqbQv+fvUf8Av4n/AMRVab4L+HZ5TI95qYJ9JY//AIivQqKAPNZvgX4ZnUB77Vhg54mj/wDjdRx/AXwvHIrrf6vlTkZmi/8AjdenUUAeef8AClvDv/P7qn/f2P8A+Iru9Pso9N0y1sYCzRWsKQoXOWKqoAzjvxViigAqG7tkvLKe1lLBJ42jYr1AIwcfnU1FAHI/8K30j/n5vf8Av4n/AMTUbfDDRWYk3N/z/wBNE/8AiK7KigDjP+FX6L/z9X//AH8T/wCIqOf4U6HcQmN7rUACe0if/EV29FAHnv8Awpjw9/z+an/39j/+Iqf/AIVHoP8Az96j/wB/Y/8A4iu7ooA4YfCXQgMC71H/AL+J/wDEUo+E+hj/AJe9Q/7+J/8AEV3FFAHDN8JtCZSpu9RwRj/WJ/8AEVD/AMKd8P8A/P5qX/f2P/4iu/ooAr2FnHp2m21lAWaO2hSFC5yxCgAZx34qxRRQAUVzfxB/5EXUP+2f/o1a8ToA+kKK+eh0H0qCb/WfhQB9GUV88WP/AB8H/dq8/wDq2+hoA95or5rHSs26/wCPp/w/lQB9TUV8u2X3n+gqW9/48Zv9w0AfTtFfINfU3hH/AJEnQ/8AsHW//otaANiiisTxt/yIHiD/ALBlz/6KagDbor4jrudL/wCQTa/9cloA+o6K+UdX/wBdF/un+dN0X/kKx/7rfyoA+sKK+da3aAPbaK8Ll/1hrS0H/j4m/wBwfzoA9iorzy3/AOPmP/eFbFAHV0VFaf8AHnD/ANc1/lUtABRWL4w/5FS8/wCAf+hrXl46igD2qivlSX/Xyf75/nXbeD/+QEf+uzf0oA91orz3w3/yFG/65H+Yro7n/jzn/wCuTfyNAG/RXha/dH0rLu/+Pt/w/lQB9EUV5H8PP+PjUP8AcT+ZrvIP9en1oA6CiqFXY/8AVr9BQA6iiuX+JP8AyT3Uv+2X/o1KAOoor5dqQdKAPp6ivnCy/wCPf/gRrY0X/j+b/rmf5igD3eivJD0NRUAewUV4ddf8fL/57UkPU0Ae5UV4Zdf8ekv+7WPQB9F0VneHf+RX0v8A684f/QBWjQAUVl+J/wDkUdY/68Z//RZr5xoA+oqK+TJv9e/+9Wpov+pm/wB4fyoA+n6K+cm6UygD6Qor54q3B/qRQB75RXgcvQVHQB9AUV8/17hoH/It6Z/16Rf+gCgDQoorL8Uf8ihrH/XjP/6LagDUor5brrtP/wCQbb/9cxQB7tRXz3rP+ui/3T/OqMH+uFAH0lRXzyOorrR0FAHrNFfOfiP/AJDkv+6v8qwNQ/1cf+8aAPquivkuy/4/oP8AfFdLQB9H0Vm+HP8AkVtK/wCvKH/0AVpUAFFY/i//AJEjXP8AsHXH/otq+V6APsCivly1/wCPOL/cFXLf7rfWgD6Xor5mv/8Ajzb6j+dZNAH1fRXy5XpPg3/kVrf/AH3/APQqAPWqK4SPqakoA7eiuIrsLL/kH2//AFyX+VAE9FFYfjb/AJJ/4h/7Bdz/AOimoA3KK+IKqSf6xvrQB91UV8UaP/qZf94fyqzff8ebfUUAfZ1FfDtYNAH6AUV8W6B/yBov95v51u6b/rZP90fzoA+taK+V5/8AUP8A7prNoA+uqKyPCX/IlaJ/2D7f/wBFrWvQBzXxDOPAeokf9Mv/AEaleH72r274juE+H+pMeQPK/wDRqV4QbtcfdagDpVtoyinB6DvWXqR8m72x8DaDzWujjy1/3R/KsLW7lY9QAKk/ID/OgCxpbl7shumw1rFAVIPpWDolwsl+wCkfuz1+oreznigCl9ig/un/AL6rnNUHlanMifdBGPyrsfsrf3hXGa7KIdcuY2BJUjkfQUATaZ87S7uwFWL9ANPnI/uGq+g/6TJOE42gda0NQtW/s24+YfcNAHI5r6n8I/8AIkaH/wBg63/9FrXy99lb+8K+ovCQ2+CtEHpp9uP/ACGtAGvWL4yAbwJrwPQ6bcA/9+mrarH8XLu8Ea4o76dcD/yG1AHyT9ki9D+ddhp0arplsB0EYrnvsT/3lrorP5LGFTyVQCgDD8T3ElvdW4iIAaMk5Ge9QeHbyaTW4lcjG1u3tS+LpALy24/5Zn+dU/DcoGuxcH7rfyoA7ze1dFXL+cvoa6jFAFSd2ExArU8OEvcz7v7g/nWNdyBLlgQegrW8LyBrq4wD/qx/OgDpoQBMhHY1o72rORtrqT2NWPtS/wB1qAOzs+bGD/rmv8qmqCxO7T7c+sSn9BU9AHPePJXh8E38kZww8vGRn/loteNDVbrP3l/75FevfEiUQ/D/AFKRgSB5XA/66pXhH9qRf883/SgCm/MjE9SxNeg+B7eOTw6WYHPnv39hXnxOST6mvQ/AsgXw6QQf+Ph/5CgDqrBRaXBkh4YqRzzxVq9v7hdPuSGXIhcj5f8AZNZ32xIPmZWI6cVBfatF/Zt1+7f/AFD+n900AeSr4k1LaP3kfT/nmK2rFze2MdxccySA7iOB1xXALrEOwfu5OntXdeH5RcaDayqCAwOAf940Aeg/Dm3jNzqOQfuJ39zXbzxrBbySx8Oi5Uk55rjfhyMXOo/9c0/ma7DVJhb6TdSsCQkZJA70AZv9q3f99f8AvgV1Fo5ksoHb7zRqT+Vea/8ACQ2//PGX9K9F0yQTaTZyKCA8CMAe2VFAFquT+J7FPhxqjL1Hlf8Ao5K6yuS+KRx8NdU/7Y/+jkoA+fftMvqPyq2JGwPp6Vm7qtC5XA4NAGxZSN9n/wCBGtfSJWF62P7h7fSufs7tBb/db7xrW0i6Vr1htb7h/pQB0fnv6j8qN5qt9oX0NJ9tT+61AFa6kb7U9NilYZ/wps7iSdnHAPrUlrA0xbaQMDvQA24kY20mT/D6VlbjW5NYSNC43ryKof2VL/z0T9aAPb/Dv/Ir6V/15w/+gCtKs/QEMfhrTEPJW0iB/wC+BWhQBmeJBu8KasD0NlMP/HDXz59mj9D+dfQviIZ8L6qPWzm/9ANeCeQ3qKAMGeBBcScH7x71q6JBGYJuD98d/as+5XF1IPRjWhpEoihlBBOWHT6UAaTQR7eh/Oo/JT0P50sl2gQna1Q/bUz91qAN/wDsy2/ut/31WhaaRZtbKSjZyf4zUG6tWx5tFPuf50AZGrafb20URiVgWYg5bPasmRAsTMOoGRW54jmENtAWBOXI4+lc7JeI8bKFbkYoAh85/UflXu/h458MaWT/AM+cX/oArwPdXvnh3/kV9K/684f/AEAUAaNZniUZ8J6uD0NjN/6Aa06zfEn/ACKurf8AXlN/6AaAPnf7PH6H866exUCwgA6BBXPba3bWdVs4lIPCCgDP15ilxDt/uH+dZ1vK3nDkdD2q5rsgknhIBGEP86zoXCSAmgDR8xq2/wC0bn+8v/fNc39pX+6al/t+D/njL+lAFbW7qWTVpGYjO1e3tWTcuZFUN2NT6jfR3F88iowBA4P0rPubxI1XKscntQBLbjbdRsOoYEVsfaZPUflXPW9/G1zGAjcsPStf7QvoaAPpLwyd3hPSCepsYT/44K06y/C5z4Q0c+tjB/6LWtSgDG8YnHgXXiO2m3H/AKKavk/zn9R+VfV/jM48B6+f+obcf+imr5J84ehoA6S1nf7JFyPujtVuC4k2tyOvpWJBqMaW8alHyFA7VetL1JUYqrDB70AWr24kNq3I6jtWZ5z+o/Krtw4lhKKMEkdaqeQ2RyOtAHS/YYMfdb/vqu/8KQInhyBVBxvfv/tVxv2dsDkdK7rwxCR4fhGR99/50AXpP3YBXvTBK2ev6VJdDYq55yarhvmFAE29q7Wx5062/wCuS/yFcRmu2sP+Qbbf9ck/kKALFYnjXnwD4g/7Blz/AOimrbrF8ZDd4E18DvptwP8AyE1AHyB5a1XeBC54PX1rS+yP/eWqMo2ysp7HFAG34bsYJracyKxIcYw3tVvWNPt4tMd0VgQy/wAXvTvCFu09ndFSBiQDn6Vo65Yv/ZMnzr95f50AcSYUweD+dcvuOTXamxfB+delcYYzk896AOs0An+xov8Aeb+ddJoiLLPMH7IP51zugRn+xYuR95v511Ph6BnuJ8EcIP50AXLq3jWzlIByEPesKupvLRxYz/Mv3DXN/Z29RQB9PeEv+RK0T/sH2/8A6LWtesjwmMeC9EHpp8H/AKLWtegDlfiX/wAk71P/ALZf+jUrwE9K9++Jf/JO9T/7Zf8Ao1K8CPSgDrY3Xy0+YfdHf2rndfIOpDBB/dj+taifcX6CsXWP+P4f7goAn8Pn/iZN/wBcz/MV0gI3DnvXMaD/AMhFv+uZ/mK6JfvD60AaWa898S/8jFd/Vf8A0EV6BXA+Iv8AkYLr6j/0EUAWfC3+tuv91f5mtq/GdOnA5Ow1jeGf9bc/7q/zNblx/wAe0n+7QByvlSf3G/KvpjwqMeDdFB4P2CD/ANFrXz5X0N4a/wCRT0n/AK8of/QBQBp1k+K+fBmtY/6B8/8A6LatasvxR/yKGsf9eM//AKLNAHzDsf8Aut+VasBxbxg8HaKhp46UAc54u5vLXHP7s/zql4dIXW4ixwNrcn6Vd8T/APH1b/8AXM/zrP0r/kIJ9D/KgDtfNjyPnXr612IdcD5l/OvOB1H1ruB0H0oAiviDdtgg8D+Va3hT/j7uf+uY/nWHcf64/QVteFP+Pu5/65j+dAHVUuKYv3hUtAHcaf8A8gy1/wCuKfyFWKr6f/yDbb/rin8hVigDkvikQvw11UsQB+55P/XZK+dvOi/56J/31X0F8Xf+SV6v/wBsf/R8dfMZ6UAdIBwK77wUwXw+QxAPnv1P0rhE/wBWv+6P5V2fhX/kCn/rs39KAOiupo1hBaRAM92rNvrmD+zbr99H/qH/AIx/dNQ6z/x4r/10H8jXO3Y/0G4/65P/AOgmgDylZE2D5l6eten+Exu8K2RXkbW5H+8a8gX7o+lex+CP+RL0/wD3W/8AQzQB6P8ADv5bjUN3HyJ1+prqPEEiL4cvyzqAITkk1y3gn/X3v+4n8zWv4q/5FHVP+vZqAPP/ALVb/wDPeP8A77FezaGQ3h7TipyDaxEEd/kFfN2K+i/DH/Io6R/14w/+ixQBqVyPxS/5Jrqv/bH/ANHJXXVyXxS/5Jrqn/bH/wBHJQB86Yp25fUfnRVY9TQBrWjDyeo+8e9a+ikG+bBz+7P8xWBZ/wCo/wCBGtvw/wD8hJv+uR/mKAOhPQ1BketWT90/SqVADyCTwCavaWjFpcKTwO1Vo/8AVitbRPvzfQUALKjiJiVYDHXFU8itu8/48Zv901gUAeyaL/yANP8A+vWP/wBBFXao6J/yL+nf9esX/oAq9QBn+IP+RZ1T/rzl/wDQDXhWD6V7rr//ACLep/8AXpL/AOgGvD6AOculP2yXg/fParFgwSN95C5PGTiluf8Aj6l/3jVaTqKANCWWPyz86/nVfzY8j516+tUpf9War9x9aAPSPNjwPnXp61q2NxCLNQZowcnqw9a5TsPpViL/AFYoAueLLiE2ltiaP/WH+IelcwJoicLKhJ6AMKf4oH+i2/8A10P8qwLX/j8i/wB8UAb1e++HP+RW0r/ryh/9AFeA1794c/5FbSv+vKH/ANAFAGlWb4k/5FXVv+vKb/0A1pVmeJv+RS1f/rxm/wDRZoA+f9y+o/OtOCWMW6ZkUfKO9YVSr90UAT6sQ80ewhsKc4571Q+7y3A9TVmoLz/j1b6igBvmJ/eX86zvOi/56J/30KWsSgDTldDISGUj2NU735kTbzz2pifdoNAEdqp+2Q8H747Vv1kW3/H1H/vCtigD6W8K/wDInaN/14Qf+i1rVrK8K/8AInaN/wBeEH/ota1aAMTxp/yIXiD/ALBlz/6KavkPcPUfnX1342/5J/4h/wCwXc/+imr48oA0kYeWvI6VpaYR5UnP8Q/lWNH/AKtfpWrpX+qk/wB4fyoA0QM8Dk+1LsfI+VuvpTrb/Xj6Gr3cfWgDpfLfA+RunpXbeGgRoMQIIO5uv1rmh0H0rqtD/wCQRH/vN/OgCW+BKJgZ5qoqtuHB/KtG4+6v1qvQBHg+ldtYf8g22/64p/IVxtdnY/8AIOtv+uS/yFAE9Y/i8E+CNcA5P9nXH/otq2KyvFP/ACJ+s/8AXhP/AOi2oA+UvJl/55v/AN81jXIIupQRg7jxXZ1yOof8hK5/66GgDqvAyk2N5gE/vV7f7NbGto50mTCsfmXt71nfD/8A5B97/wBdl/8AQa6HVv8AkGv9V/nQBwxikwf3bdPSuCMUmT8jdfSvVD0P0rgT1P1oA2NARxo0WVb7zdveur8Mo32q4+U/6sdvesPRP+QTH/vN/Oup8N/8fNx/uD+dAF69RvsE/wAp+4e1czsb+6fyrsr3/jwn/wBw1zNAH0X4V/5E7Rv+vCD/ANFrWrWX4Y/5FHSP+vGH/wBFitSgDlviTz8PdS/7Zf8Ao1K8F2j0r3r4k/8AJPdS/wC2X/o1K8FzQBqqzbRyelYWsyML8fMfuCtsH5R9KxNXTdfA5/gFADtDlcX7YY/6s/zFdBHLIZF+c/eFc1prfZ7ovjd8hGK14r7M8Y8vq4HX3oA64gZrkdat4X1i4Zo1JJGT+ArsCvJ5rndTs/M1KZt+MkcY9qAKWlxpC0vlKFyBnHer7EspB5BHNRWtr5Rb585HpU5T5TzQBX8qP+4K988OjHhfSgOn2OH/ANAFeEbfevd/D3/IsaX/ANecP/oAoA0azPE3PhPV8/8APjN/6Aa06zPEv/Ip6t/15Tf+gGgD538tP7oqFuGIHTNWcVC0eWPNAGHrUaSTxF1DYU4z9azkRYW3xKFYdCK2dVg3Sx/Nj5T296zZofLiLbs/hQAwXE2R+8brXoAlfA+Y9K85Dcj616CH4HHagBXYs2Scmt7wl/x93P8A1zH86wgu4Zzitvw2/kXNwcbsoB+tAHWIP3i/WrO0elZ9tc+bdRR7cbmAznpW39j/ANv9KAOosf8AkHW3/XJf5Cp6htF22MC9cRqP0qagDifjCSPhPrBHB/cf+j46+XDI+PvGvqT4vrv+FOsLnGfI/wDR8dfMBtuD836UAdnFGnkp8o+6P5Vv6NK8NgViYqu8nA/CsmK2/cx/N/AO3tV22uPskXlhd/Oc5xQAviW9uY9LUpM6nzRyPoa5KfUr02soNzJgxsDz7VqeLtWMWjI3kg/vlH3vY1xUmul42X7OBuUjO/8A+tQBzgZto5Ne0+BefBGnE/3W/wDQzXjQi9/0r2jwLHjwRp3P8L/+hmgDuvC8jxS3PlsVyq5x9TVnxddzjwZqxErZ+zNWRp18dOaQiPzPMAHJxjFVfF3iEnwbqw+zD/j2b+P/AOtQB5V9vu/+fh/zr6q8IMX8D6EzHLHTrck+v7ta+NP7fP8Az7D/AL7/APrV9j+CJPN+H3h6TGN+l2zY9MxLQBuVynxOAPw51QHkfuv/AEcldXXK/EsZ+Hepj/rl/wCjUoA+fPLT+6Kh8qP+4Kt+X71CV560ALEoVMKMDNbHh7/kJN/1yP8AMVkoMLWpoLeXqDHGf3Z/mKAOlf8A1bfQ1iedJ/fNarz5Rht7HvWTt96ANmyAezjZhkkHJP1rY0hQHlwMcCs3ToN2nxHd2Pb3rY0uHa0vzZ4HagCTUzt0q5K8ERnBrjvtE3/PRq7PVE/4lN1z/wAszXF+X70Ae6+HyT4Z0wnkmziz/wB8CtCs/wAP8eGdL/684v8A0AVoUAUNd58O6jn/AJ9Zf/QDXi/lp/dFe0a7/wAi7qP/AF6y/wDoBrxjdQBj3EUf2qT5R941n3qhJECjHFac4zcSf7xqjdw73U7sYHpQBnSfcqKrc1vtiJ3Z/Cq+z3oA2ftM3/PVqie/ukYhZ3A9M1T+3n/nn/49VS41QrMR5IPA/ioAk1m8uZYYhJMzAMcZ+lZ9nNIb6HLn74pbm7+1qqlNm0565ptimdQg5/jFAHS72/vGvoTw1z4U0n/ryh/9AFfP3k+/6V9BeGxjwrpI/wCnKH/0AUAaVZfij/kUNY/68Z//AEWa1Ky/E4z4R1cf9OM3/os0AfOG5vU0wzSAkBzU3k/7X6VTkfbKy4zg4oAspLIQcuajupHNu2WPUVHHNgHj9aSeTfERjFAFbcfWsqtTFR/2WP8Ant/47QBXiUGMZFK6qAMCrK2flrt3598UyeHYo+bPPpQBFbgfaY+P4hWvisu2TN1EM/xCtnyP9r9KAPo/wt/yJ+jf9eEH/ota1ay/C4x4Q0celjB/6LWtSgDD8bf8k/8AEP8A2C7n/wBFNXx5X2J40G7wD4gHrplyP/ITV8h/Zv8Ab/SgBis20c1taH80E27n5x/KsQ/KxXrjitvQebeb/fH8qANq1UfaF47Gr4RcjjvVKzGbpR7GtIR8jnvQB2YjTA+UdK6rQ0X+yI/lH3m/nXPC34HzdvSt/SpPJ05ExnBPP40AT6gAsabeOTVJCTIoPrUmq3eyKP5M/Me/tWfFfEzIPL6n1oA1No9K6+y/48Lf/rkv8q4v7R/s/rXZ2Jzp9sfWJf5CgCes7xCofwxqisMg2coI9fkNaNUdbXf4f1BM43Wsoz/wA0AeC/YbX/nglcJqtvCNYuwI1AErV6n/AGWP+e3/AI7XE6noAfVbpvtJGZScbP8A69AFnwSipZXexQMyr0+lbepgHT3B9R/OqPhyxFhbzqJPM3uDnGMcVe1Hmxce4/nQBhlFwflHSuGMMeT8g613hXg89q5D7Fyf3nf0oA2dFij/ALJj+Qfeb+ddJoSKs820Y+QfzrG0e226XGN/8Tdvet/R4tk0vOflHb3oAvXYzZzZ/uGsDy0/uiuiuI91tIM9VNZP2P8A2/0oA958NceFNJx/z5Q/+gCtOs7w6NvhfSl9LOEf+OCtGgDlviUQPh5qZPT91/6NSvAvMT+9XvfxO/5Jzqn/AGy/9HJXz5QBuqRtH0rH1U/6aP8AcFay/cX6CsfVf+Pz/gAoAht5FSTLHAxVyC4iNzEA4++v86zDUlt/x+Qf9dV/mKAPUCp3HisS/U/bpOO4/lXQN94/WsO//wCP6X6j+VAFQOsX+sO3PSlWVJGCRtuZuAPWoLz7qfU0yx/4/wCD/fFAF77JP/zzP5ivcdABXw1pgPBFpED/AN8CvIq9g0X/AJAGn/8AXrH/AOgigC7WZ4l/5FTVv+vKb/0A1p1meJf+RU1b/rym/wDQDQB89YppU5p9FAGZqUTtJHtXPyms26hk+zn5T1FbV599fpVG7/49m+ooAxBDJkfKetd4GGBz2rjh1FdcOgoAtxAmMEdK09IlSCaUzNtBUAZ+tZ1t/qB9TU6dTQB0+nXlu+qWyrKCTIABg12Oa830b/kOWX/XZa9GoA6O2/49If8AcX+VS1Fa/wDHnD/1zX+VS0AcZ8Wxn4W6vj/pj/6OSvmco2DxX018Wf8Akl+rf9sf/RyV81HoaAO3ijbyY+P4B/KoLi4igl2TOFbGcGr0X+pj/wBwfyrC1z/kID/rmP60AZHjW/tRoSZmX/Xr2Poa4UX9qxCiYEngcGt3xv8A8gGP/r4X+Rrhof8Aj4j/AN8fzoA6P7PN/cNexeCGEfgvT1c4YK2R/wADNeWk8mvTvCf/ACK1l/ut/wChGgDcuL62twpmlCbumQeawvFeq2T+ENUVbhSxtmAGDT9d/wBXB/vGuV8RD/imdQ/64NQB5z9ph/56D8q+3/AJDfDbwyRyDpNqR/35Wvg6vu/4e/8AJMfC/wD2B7T/ANEpQB0Vct8SRn4e6kB/0y/9GpXU1zHxG/5EDUv+2X/o1KAPA9jelVSwyee9aNZLfeP1NAFhOVyK0dG4vmz/AHD/ADFZsH+r/GtHS/8Aj7P+4aANtnXaee1UNw9atH7p+lUqAOo0tSdMhIHGD/M1r6eCrSbuOBWZo3/IIg+h/ma1bX7zfQUAGqsBpF0Sf+WZrivNT+9XY6v/AMgW7/65GuEoA9/8PnPhnSyP+fOL/wBAFaFZvhz/AJFbSv8Aryh/9AFaVAGfr7BfDepsxwBaSkn/AIAa8Q+223/PUfka9s8S/wDIp6t/15Tf+gGvnnFAFyWVGmcq2QTxVad1LDB7Ug6VHL94fSgCK6dRbkk4GRVHz4/7wqxe/wDHo31H86y8UATfaIv74qncMHmJU5GBUdFAD4o2kJ2DOBVuxglF/AShxvFR2H+sf/drTtP+PyL/AHxQBs7G9K988Of8itpX/XlD/wCgCvCK948Pf8ixpf8A15w/+gCgDRrM8Tf8inq//XjN/wCgGtOszxL/AMinq3/XlN/6AaAPnfBqjLazNM7LGSCeDWjS5oAyvJkj4dSM9Kjm+WMluBV+7Pzr9KoXf/Hs31FAFfzE/vVoeRJ/cNY9dLmgDOeJwxBWq12jBFyO9aU3+tNUr77ifWgCraKTeRAD+MVv+TJ/drEsv+P+D/fFdNmgD33wyMeE9IB6ixh/9FitOs3w5/yK2lf9eUP/AKAK0qAMXxn/AMiHr/8A2Dbj/wBFNXyTX1t4z/5EPX/+wbcf+imr5IoAoy3ESzOC4BB5re8NsJracxHcA4Bx9K5G7/4/Jf8AfNdV4K/48rv/AK6r/KgDpLNGW6UkYGDWiOo+tVLf/XD6Grg6j60Ad6HXA57VsaewNkuPU/zrCHQfStrTv+PFPqf50AQa1IqQxbjj5j/Ks23mjNzGA3JYVc8Q/wDHvB/vn+VY9n/x+w/74oA6Ku40/wD5Btt/1xT+Qrh67jT/APkG23/XFP5CgCxVPVxnRL4Dr9nk/wDQTVyquqf8ge8/64P/AOgmgDyvyZP7tcze6bePfzskDFWckHI5rsaoyn9631oA5+ztZrZHE8ZQscjPelvkZrNgoycj+daV399fpVK5/wBQfqKAMXyJcfcNc59iuf8AnkfzFdhWRmgCTS4ZE09FdCDk8fjW3pMTmaXC/wAI/nVC0/49l+prY0X/AF0v+6P50AWJLeVomCoSSOKp/wBn3X/PFvzFbg607NAHp2gqU8OaarDBW0iBH/ABV+qmkf8AIFsf+veP/wBBFW6AOT+J/wDyTjVP+2X/AKOSvns19Qa9otv4h0SfS715Ugn27miIDDawYYJBHUDtXG/8KY8Pf8/mp/8Af2P/AOIoA8wT7i/QVh6z/wAf4/3BXu4+FWhgAfatQ4H/AD0T/wCIqpc/Brw9dzeZJeamDjHyyx//ABFAHggqW2/4/IP+ui/zFe4/8KR8N/8AP7qv/f2P/wCN05Pgp4cjkVxe6plWDDMsfY/9c6AMFj8x+tcvqrMNUmwx6jv7CvZT4F0wn/X3f/fa/wDxNULj4XaLc3DTSXV+GbqFkTH/AKBQB4reO21PmPU96XSGJ1m0BJI80d69hl+EOgygbrvUhj0lj/8AiKW2+EWg2t1HPHd6iWjbcA0seP8A0CgDlsD0FesaP/yA7D/r2j/9BFY3/CC6Z/z3u/8Avtf/AImugtoFtbSK3jJKRIqKW6kAY5oAlrM8S/8AIp6t/wBeU3/oBrTqC+tI7/T7izmLLHcRNE5Q4IDAg49+aAPm6kr2D/hU2hf8/eo/9/E/+Io/4VLoX/P3qP8A38T/AOIoA8bkGSMjNQzKpiOQPyr2g/CPQT1u9R/7+x//ABFNb4QaAy4N3qX/AH9j/wDiKAPENi/3V/KtqvUv+FN+H/8An81P/v7H/wDEVZ/4VTof/P1qH/fxP/iKAPKoydg5NNndgq4Yjn1r1kfC3RFGBdX/AP38T/4ikf4V6I4GbrUOPSRP/iKAPMfD7ufEmn5Zv+Phe/vXrVV7P4YaNZX0N1Fc35eFw6hpEwSPX5K6L+xrf+/L+Y/woAt2v/HnD/1zX+VS02NBHGqLnCgAZp1AHIfFX/kmeq/9sf8A0clfOBAx0FfVniDQ7bxHodxpV88scFxt3NCQGG1gwwSCOqjtXFf8KQ8N/wDP7qv/AH9j/wDjdAHn8f8AqU/3R/KuL8Xu664ArMB5K8A/WvolfhhoqqALm/wBj/WJ/wDEVlal8EPDeqXf2i4vdVV9oXCSxgYH1jNAHyp4qkc6QmXY/vh1Psa5S0JN7Bkn/WL/ADr7Cv8A9nDwjqNuIZ9R1tVDBspPCDn8Yves+P8AZY8ExSpIuqa/lWDDNxD2/wC2NAHkbRpuPyL19K7/AMOADw7a4AHDdv8AaNd8fgZ4aJ/4/tW/7/R//G617L4YaLYWcdtDdX7JGDgtImeuf7lAHiPjt2S3sdjFcu+dpx2FcDrM0p0S8Bkcjyj/ABGvqLV/hBoGtJEt1d6kgiJK+XLGM59coax7n9nrwpdWskEmoayFkXaSs0Wf/RdAHxpub+8fzr78+HP/ACS3wr/2BrP/ANEpXm//AAyt4I/6CniD/wACIP8A4zXr+i6VBoWgafpFo0j2+n2sdrE0pBdlRQoLEADOBzgCgC7XMfEb/kQNS/7Zf+jUrp6o61pEGu6PPp128iQzbdzREBhhgwxkEdR6UAfOQ61zrk+Y3J6nvX0H/wAKk0L/AJ+9R/7+R/8AxFUj8EPDZJP23VeTn/Wx/wDxugDxix5t+f7xrY0Uf6c3/XM/0r1WL4M+HoU2reamRnPMsf8A8RVm1+E+h2kxkju9QJIx80if/EUAeesBtPA6elZ+B6V66fhxpBBH2i9/77T/AOJqH/hV+i/8/V//AN/E/wDiKAOK0zjTYceh/nVxWI6Ej8a7WDwFpdvAsST3ZVemXXP/AKDUg8E6aP8Altdf99r/APE0Aef6izHTbjLH7h71yle0zeBNMngeJ57sK4wcOuf/AEGs/wD4VZon/P1qH/fxP/iKAOj8O/8AIr6V/wBecP8A6AK0qhsrVLGwt7SEsY7eJYlLHkhRgZ9+KmoAyfFfHg3Wsf8APhP/AOi2r5m3v/eb86+p9Qso9S0y6sZyyxXULwuUOGAYEHGe/NcL/wAKX8O/8/mp/wDf2P8A+IoA8cRm8tfmPT1qtduwdcMw49a9wHwd8PqoAvNS4/6ax/8AxFRy/Bjw9KQWvNTGPSWP/wCIoA8Cv5H+xt87dR396yfMf++35mvo2b4HeGpoyjX2qgH0mj/+N1X/AOFA+Fv+f/WP+/0X/wAboA+ftx9T+dSITt6mvfv+FCeF/wDn/wBX/wC/0X/xunD4DeGAMfb9W/7/AEX/AMboA8O0s/vZP90fzrUjOJVx617HB8D/AA3bsxS91U7hg5lj/wDjdTj4N+H1YEXmp8f9NY//AIigDyLe395vzr6J8M8+EtIz/wA+MP8A6LFcx/wqLQf+fvUf+/sf/wARXaWNnHp+nW1lCWaO3iWJC5ySFAAz78UAT1neIv8AkV9U/wCvOb/0A1o1De2qX1hcWkpYR3ETRMVPIDDBx780AfPW0eg/Kta3ijNtGTGhO0fwivQf+FXaL/z9X/8A38T/AOIqynw80mONUFxeYUYGXT/4mgDyTWI0E0WEUfKeg96x71F+yN8o6jt717Zc/DHRrplaS5vgVGBtkT/4iq0vwj0GaMo13qIB9JY//iKAPCNq5Hyjr6V1oRcD5V/KvQ/+FL+Hf+fzU/8Av7H/APEVo/8ACstG/wCfm+/7+J/8RQB4fqfGoOBwMDp9KrIAxO4Z+te3T/CHQLiYyPd6kGOOksf/AMRTF+Dnh9el5qX/AH9j/wDiKAPHrJF+3wfKv3x2rpdi/wB1fyr0CL4RaDFMki3eokqcjMsf/wARV7/hXGkf8/N7/wB9p/8AE0Ab2g8eHNNx/wA+kX/oAq/UNpbJZ2UFrEWKQxrGpbqQBgZ/KpqAMPxv/wAk+8Q/9gu5/wDRTV8cb2/vH86+2NV06LV9HvdNuWdYby3e3kaMgMFdSpIyCM4PpXmn/DPPhT/oIaz/AN/4v/jdAHzawBYkgE12XgdV+w3nyj/Wr2/2a9f/AOGd/Cf/AEENZ/7/AMX/AMbrT0r4K+HdHikjtr3VGEjBj5ksZ6DHaMUAeZSqBGSAAfYVACcjk9fWvYm+FWiMuDdah/38T/4imf8ACpdC/wCfvUf+/if/ABFAHPA8D6Vo2bEWy4J6nvXT/wDCFad/z2uv++1/+JqaPwpYxRhVluMD1Zf8KAOI1gkwxZJPzHv7VS07nU7bP/PQV6Dc+DtPulUSTXICnI2sv/xNRQ+B9NgnSVJ7osjBgC64/wDQaAKe1f7o/Kuqs/8Ajxg/65r/ACqp/Ylt/fl/Mf4VfjQRRJGucKoUZ9qAHVV1T/kEXn/XB/8A0E1aqOeFbi2khckLIhQkdcEYoA8yqdY0KAlFJx6V1n/CH2H/AD2uf++l/wDiaePCtiAB5txx/tL/AIUAeca4oWeHaAPkPQe9ZTDK816nd+BtNvHVpZ7sFRgbXX/4mq5+HOkH/l4vf++0/wDiaAPMdq/3R+VHkx/880/75Fem/wDCuNI/5+b3/vtP/iaX/hXOkf8APxe/99p/8TQB5lsQcBVA9hWpoaL583yj7g7e9dx/wrnSP+fi9/77T/4mrFp4E0yzdminuyWGDudf/iaAOZVF3D5V/Kpdif3V/KurHhSxB/1tx/30v+FL/wAIvZf89bj/AL6X/CgDR07jS7XH/PFP/QRVmmQxLBBHEhJWNQoJ64AxT6ACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDM8SyyQeE9XmgkaOWOxmZHRiGUhCQQR0NfPH/CV+If8AoPan/wCBkn+NfQ/iVBJ4U1ZDwGspgSP9w189/wBjQ/8APWT9KAOn0/X9YfTbdn1a+ZigJJuXJP61pWetaoyvu1K8PI6zt/jXOW37i1jiXkIuATVy3unjDYVTn1oA1NV1vVY9LmePU7xGAGGW4YEcj3rmf+El13/oNaj/AOBb/wCNXdUvHfTJlKqAQP51zfmGgDdHiTXMf8hnUP8AwKf/ABrS0/X9Ye3JfVr5juPJuXP9a5wL8o+lXbSUxQlQAfmzzQBoaz4h1mKwDRavfo28DK3Lj+tYX/CU+IP+g7qX/gZJ/jR4ivXj0sMFU/vVHP41zA1OUkDYnJx3oA6H/hKvEP8A0HtT/wDAyT/Gvcvh3d3F94B064vZ5bid/N3SyuXZsSuBknnoAK+eMV9BfDH/AJJzpn/bX/0c9AHV1neIpZIPC+qywu0ckdnMyOhwVIQkEHsa0azfEi7vCurKe9lMP/HDQB4L/wAJPr3/AEG9S/8AAuT/ABratfEGstaRFtWviSvJNy/P61z32JP7zU8Xz24ESopCcAnvQAeKvFGv28tqLfXNSiDK2dl3IueR6GsGPxh4mMgz4i1b/wADpP8A4qjxJctcyWxdQNqt0+orMsYRPexxsSAxPI+lAG0fF3iTB/4qHVf/AANk/wDiq7iHX9YNvETq18SUBJNy/p9a4U6RDj/WSfpXQR3TJGihVwqgfpQBdvvEWtpcAJrGoKNvQXTj+tV18S67n/kNah/4FP8A41nXtwzzgkD7tFiv2m42PwNpORQBqx+JNcMqA6zqGNw/5en9frXaHVdRz/x/3X/f5v8AGuIj0+PzU+dvvD09a7Q2656mgDvPDksk+gW0k0jSO27LOxJPzHvWnWX4bXZ4ftlHbd/6Ga1KAKesO8Wh38kbMjrbSMrKcEEKcEGvKP7b1b/oJ3n/AIEP/jXqevts8Namw6raSn/xw14d/aMn9xP1oA0pNf1gSMBq191/5+X/AMaQa/rH/QWvv/Al/wDGsdrpmYkqvJqGW9eMgBFOfWgDbl8QayIzjVr4f9vL/wCNV/8AhItb/wCgxf8A/gU/+NZS3rzNsZVAPcVJQB0/9uat/wBBS9/8CH/xqhdeINZW4YLq98BgcC5f/Gq/2lv7orG1HUZI75lCKRgdc+lAG2fEWt/9Bi//APAp/wDGmv4j1sI2NY1Dp/z9P/jWRp87XkjrIAu1cjbV17ddh+Y9KAF/4SXXf+g1qP8A4FP/AI17r4flkm8M6XLM7SSPZxM7ucliUGST3NeA/ZV/vNXvnhwbfC2lD0soR/44KANKuc8f3VxZ+B9Qns55LeZPL2yROVZcyKDgjnoa6OuW+Jbbfh5qZH/TL/0alAHjn/CT69/0G9S/8C5P8awm8X+Jd7f8VDqvU/8AL7J/8VT/ADm9BVE2SFidzcnNAHUaN4n1+WwLS63qTtvIy13IT/OrN14k1xYgV1rUAc9rp/8AGsTTF8i02LyN5PNN1a7e3sw6qpO8DmgDQk8Ua+InI1zUs7T/AMvcnp9a5seMvE+P+Rj1b/wOl/8AiqiOqyspUxp8wx3ql9nX1NAHpnh7xFrU2gWsk2sX8jsDlnunJPzHvmtVNc1Y5zql7/4EP/jWN4XskbwzZnc33W/9CNS6tKdMSIxAP5hIO7tigC9f69q6afOyareqwQkEXDgj9a5n/hKPEH/Qc1L/AMC5P8afNqktxC8LxoFcYJGciqH2Zf7xoA+i/Dksk/hXSpZ3aSSSyhZ3c5ZiUBJJPU1pVmeGRt8JaQPSxhH/AJDFadAGf4glkh8M6pLC7RyJZysjocFSEOCD2NeFf8JLrv8A0GtR/wDAp/8AGvdfECCTwzqaHgNaSg4/3DXhn9lRf89H/SgC5F4h1owoTq9+Tj/n5f8AxpsviLWgRjWL8cf8/T/41TMYjOwEkLwCaydZ1CSxmiWNFYMpJ3Z9aANi78Sa6tuSutagDkci6f8AxrP/AOEp8Qf9B3Uv/AyT/GsmHU5b2QQSRoqtzlc54qz9nX1NAHUf8JDrX/QXv/8AwJf/ABrKvvE+vpeME1zUlGBwLuQf1qz5Q9TXK67fPbavJEiqQFXk/SgDUn8V+IQq417Uxz2vJP8AGmQ+LPERnQHX9UI3Dj7ZJ/jXPrfPPwyKMc8VZsP32o28bcB5ACRQB1P/AAk+vf8AQb1H/wAC5P8AGvevDssk/hfS5ZnaSSSzhZ3c5LEoCST3NeEf2PD/AM9JP0r3fw8gj8MaWg5C2cQGf9wUAaNZ3iGWSDwvqksLtHJHZzMjocFSEJBB7GtGsnxWxTwbrTjkrp85/wDIbUAeF/8ACTa9/wBBvUf/AALk/wAa5288YeJVvZlXxFqwAcgAX0nH/j1Rf2nL/wA80/WsqdvMuJHPBZiSBQBoS+M/FAIx4k1ccf8AP9L/APFVY0vxh4mk1FFk8Rasy4PDX0hHT/erJgskuVJdmG044rU0XR4W1WMeZJ91vT0oA6D/AISjX/8AoOal/wCBcn+Nav8AwkWt/wDQYv8A/wACn/xqh/YkH/PWT9KufYE/vtQBv6ZrWqyaejSaleM2Ty07E9frVxdX1L/oIXX/AH/b/GsK1c21uIkGQCTk0XGpSQKpVEOTjnNAGze6xqaWM7LqN2rBCQRO3H61zX/CRa3/ANBjUP8AwKf/ABpLvWZms5lMUeChHesD7fJ/cX9aAPo3QZHm8N6bLM7SSPaRMzscliUGST3NX6zPDLb/AAlpDHqbGE/+QxWnQBleKppbfwbrM1vI8UsdhO6SIxVkYRsQQR0IPevmf/hMPE3/AEMWrf8AgdJ/8VX0p4xOPAuvf9g24/8ARTV8neYfSgCW58b+K1upAvifWQAxwBqEv/xVdv8AD3xRr97p9815rmpXDLMoUy3cjEDb2ya4gaFBcKJmlkDSfMQMYFdd4Ms002zu0iZnDyqTu7cUAdlda5qy25K6peg5HIuH/wAaoHxBrOD/AMTe+6f8/L/41W1G5aKxdgoJBHX61i/2nLj7ifrQBmHxf4lyf+Kh1Xr/AM/sn/xVbWneKNfexRn1zUmbJ5N3Ie/1rkNgya6nQ7CObSI3Z2BLN0+tAHU+HNe1ie5nE+q30gCAgPcucc+5rcm1bUhC5GoXQOP+ezf41zej2y2k0rIxYsoB3fWtG7uGjs5nABKoTQBJ/beq/wDQTvP/AAIb/GvVNId5dDsZJGZ3a3jZmY5JJUck14R/a0v/ADzT9a9z8PuZPDOmOeC1nETj/cFAGhWR4tmltvBWtz28jxTRafcPHJGxVkYRsQQR0IPetesTxp/yIWv/APYMuf8A0U1AHzB/wmnij/oZNX/8D5f/AIqnDxn4ox/yMmr/APgfL/8AFVg5qdUBUHPagDci8ZeJyDnxHqx5/wCf6X/4qp4fGHiYygHxFqxH/X9J/wDFVj2dqsiMSzDB7Vbjs0RwQzUAa3/CW+I/+hg1T/wNk/xqL/hL/Ev/AEMOq/8AgbJ/8VVPyV9TVXFAGwPF3iTH/Iwar/4Gyf8AxVSR+LfEZJz4g1T/AMDZP8aq2enR3FqsjO4JJ4GKu2+iQuzZlkHHtQBHP4t8Ri3kI8QaoCFOCL2T/Gsr/hM/FH/Qyav/AOB0v/xVbV3oUC2UzCaThD6Vz/8AZcX/AD0f9KAPqfwlNLc+C9EnuJHlml0+B5JJGLM7GNSSSepJ71r1j+EVCeCdDQchdOtx/wCQ1rYoAz9fBbw1qYHU2koH/fBrw/7JL6D869y1v/kX9R/69Zf/AEA145igDOLCM7G6rwackyDOc/lUdwf9Ik5/ipg9qAH3jiazkRPvMOM/Wsr7JL6D860W+6aZg+h/KgCEcAD2qaOZEXDZzn0qIjmmN1oAqeIpVk0oKuc+ap5H1rmFU7h9RXQa1/yDx/visJR8w470Aaua+gvhj/yTnTP+2v8A6Oevn3HtX0F8Mf8AknOl/wDbX/0c9AHV1neIBnwzqgHU2cv/AKAa0aoa9/yLmpf9ekv/AKAaAPCPs8noPzrIuZkjupEbOVbB4rose1crqP8AyErj/fNAFTUYXvWjMGCEBB3HFM0/TriPUIncLgE5+b2q5B0arVv/AMfC0AT+S/t+dH2uIcEnI46VYrJf77fU0AWZT57b4+mMc8Vc0eB2viBj7h71St/9WfrWtof/ACED/wBcz/SgDUS1lEinA4Yd66YyL7/lWMPvD61pZHqPzoA9A8OnOgWxH+1/6Ea06yvDX/Iu23/A/wD0M1q0AZviM48K6qT2spv/AEA14B56e/5V794l/wCRT1f/AK8Zv/QDXzxQBZ8xTyKin+Zhj0oX7oobmgBsPyyAnpVnzV9/yquOtLQBd+1xerflWNqMivfOy5xgdvarVZ93/wAfLfQUAXdFkVJpd2fuj+da5mRhtGcnpxWHpf8ArZM/3R/OtRD+8XnvQBNtNe6+Hv8AkWdL/wCvOL/0AV4bXufh/wD5FnTP+vOL/wBAFAGhXK/EsFvh3qYH/TL/ANGpXVVy/wASP+Sfal/2y/8ARqUAeAeU3t+dO+yy+g/OpMH0P5VZAOBxQBDCfIj2Sdc545qjrtxH/Z69f9YO3sauz/6z8KyNe/5B6/8AXQfyNAGSs6M6gZyTgcVp/YZ/Rf8AvqsOIHzo+D94dveuwKtk/KfyoA7Dwypi8N2iP94Bs4/3jVXxTKqxWuc/ebt7Crmh8aJb544PX6ms3xcR5Npz/E38hQBixzI0iqM5J9Ks7TWdb/8AHzH/AL1amD6H8qAPoDw3/wAippP/AF5Q/wDoArTrN8N/8irpP/XlD/6AK0qAKOuf8i9qP/XrL/6Aa8Zr2XXf+Rd1H/r1l/8AQDXjG5f7y/nQBjXOrWsN1LG5fcjEHC1h6zcx300TW+SEUg7hjvTdTP8AxNrr/rqarqCegJ+goAk0uB21BAMZwe/tW79kl9B+dZmkKw1JMqQMN1HtXQ0AJ9qi9/yrjPEcivrkrLnG1f5V0u5f7w/OuV1wE6vIQMjavI+lADNOt5LqR1iwSqgnJxWzpmm3CarasQuBKCfmqj4dU/aZ+D9wdveumsQRqEGQR847UAb32eT0H517LoYx4e04HqLWL/0AV5HuX+8Pzr13Rf8AkA6f/wBe0f8A6CKALtZHi0FvBetgdTp84/8AIbVr1leKf+RO1n/rwn/9FtQB8ufZZPQfnUZ0y5ZiwC4PI+atLaf7p/KrCfcH0oAo2Om3CRvuC9f71a2kWksWpI7gYCt0PtS2/wB1vrV2yIF0uSOh70Aamai+3Q+rf980/cP7w/OsrI9R+dAGidUtUO1i+f8AdqteanbSIoUvwf7tZs3+tNQyDgUAW5bqKWJo0LbmGBkVS+yy+g/OliB81eD19Ku4PofyoA9/8MAr4R0cHqLGAf8AkMVqVm+G/wDkVdJ/68of/QBWlQBj+L1L+B9dVeradcAf9+2r5V/s649F/wC+q+rfFX/Inaz/ANeE/wD6LavmjB9D+VAD7bT7j7LFwv3R/FWzpBFjDKtxwWYEbee1Mtv+PWL/AHRSucEZoAn1S9hbT3ALZyO3vWF9oj9/yq5fnNm2OeR/OsjB9DQBH9kl9B+ddj4etZRokWQPvN39657B9D+VdboHGjRZ4+Zv50AWomFmS0/AbgY5pl9qFudPn5b7h/hpNRI8uPn+I1lXhH2Gbn+A0AZ326D1b/vmvofwywbwnpDDobGEj/vgV8zV9L+Ff+RO0b/rwg/9FrQBq1i+NOfAWv8A/YMuf/RTVtVi+Mv+RE1//sG3H/opqAPkTyzV6K0laFCAMEetVsVsW4P2aPg/dHagB2n2c3lvwv3h3q2bWVeSBj61Lp4PlvwfvDtVmQHyzwfyoAoeS/t+dU/s8nt+damD6H8qrYPoaANTSrKZtOQgLjJ/i961rHTbl5H2heB/eqPRf+QVH/vN/OtzS/8AWyf7o/nQBnXmkXbWMwCpkof465v+wb7+7H/33XoVyD9ll4P3TWLtb+635UAeyeGI2i8I6RG/3ksYVOPURitSqGhf8i7pv/XpF/6AKv0AUta/5AN//wBe0n/oJryOvW9bOPD+of8AXrL/AOgGvHfMb1oA5+//AOQjP/vmnWf3X+oqvfyN/aE/P8ZpkM8iA7Wxn2oA2If9ctXKx7GeR72NWbIJPb2rYxQBlt99vrVG7/1w/wB2tFlG4/WsrUmKXQCnA2CgCpe/8e//AAIVQH3h9atXDs0eGORmq6gb1+ooA0a96+G3/JPdN/7a/wDo168P8lPT9a9y+HQC+AdOA6fvf/Rr0AdNVLWv+QBqH/XrJ/6Cau1Q1048O6iR/wA+sv8A6AaAPIq4nVf+Qvdf9dDXWec/r+lcHrF1MNauwH4809qAL9l91/qKvQf65aydHleVJt5zgjHFbNkoe8jVuQSf5UAWazW+8frXQi2iz9z9a5iR2EzgHox/nQA89a0/D/8AyFD/ANcz/SsYyN61reG2LasQenlN/SgDqD0NV6ssMKfoax/tM39/9KAPYvB3/Ip2f/A//RjVt1geB2L+DbFmOSfM/wDRjVv0AZfib/kUtX/68Zv/AEWa+da+ifFJx4P1kjqLCf8A9FtXzV58n979KALw6VZtvut9aoJIxQEntWlpqiSOQvzhhQAsv+rNV6v3EaiEkDuKqbR6UARVUn/1xp/mv604IJBuYZNAEcH3m+lWY/8AWr9aSKJATgVIVCjcvUdKALVe9+Hf+RX0r/rzh/8AQBXzx58n979K+hfDRz4T0knqbKH/ANAFAGnXOeP/APkRtQ/7Z/8Aoxa6Oub+IH/Ii6h/2z/9GrQB4vTqi3GpaAM6+/4+P+AiszUf+PUf7wrT1Di6/wCAiqbxpMu2Qbh1xQBkwf8AHzF/vr/Ou+PU1y0VlbiZCI+Qw7n1rqT1oAtQ/wCpWsHxZ/qbX/eb+Qq3LdzRSFEfCjoMCsnW55J0hErbtpOOKAM/S/8AkLW3/XQV2dcdpoA1S2/66CuvyaAPbtB/5FzTf+vSL/0AVfqhoP8AyLem/wDXpF/6AKv0AZfif/kUdX/68Zv/AEWa+dK+ifFjFfBetMvBGnzkf9+2r5h+23H/AD0/QUANuP8Aj5k/3jW34c/495/98fyqGCyt5reOWWPc7qCxyeTXR+HdOtfs8/7r+MfxH0oAgm/1RqsehrV8RQR2ehyz2y7JFZQDnPU1xv8AaN1/z1/8dFAGZ3P1q7bf6gfU1lea/r+ldZoNjb3OjxSzx7nLNk5I70AO0L/Xzf7g/nWvN/qX+lU5YI7EBrVfLLnDHOcj8ar3N5OtrKQ/IU9hQBJXv/hz/kVdK/68of8A0AV8w/2ld/8APX/x0V9NeFGL+DdFZjlmsICT/wBs1oA1qzvEX/Ir6p/15zf+gGtGs3xHx4W1X/rym/8AQDQB4PWfN/rn+tW97etZNxPILmQBv4j2oAs0VTE8h/i/SpIJHeYBjkY9KALNQVZwK0f7Ptv+eX/jxoAy4/8AVirEH3j9K1ItPtfLH7r/AMeNJJZwRAFEwT15NAFSL/XJ9a0KqtGqKWUYKjINQ/aZv7/6UAe+6D/yLem/9ekX/oAq/Wd4dJbwvpRPU2cJP/fArRoAzfEf/Irar/15Tf8AoBrwGvoDxAM+GdTB6Gzl/wDQDXhfkR/3f1oArDpWfqf+tj/3T/On3FxLHcSIjYVWIAxVC8nkd13Nnj0oAWP74qao9LAn1BI5fmUg5H4VvfYLb/nn/wCPGgBlaFp/x7L9TUfkR/3f1qGSaSBykTbVHQYoAk1P/VR/7x/lWXL/AKl/pV4O1xxMdwXkdqcLaF2CsmQeDzQBhV9HeGP+RR0f/rxg/wDRYrxH+zLP/nl/48a9y0BQnhrTEUYVbSIAe2wUAaFY3jH/AJEbXf8AsG3H/opq2ax/F/PgjXP+wdcf+i2oA+T66Kz/AOPKH/cFYnlr6V0tlCn2GD5f4B3oA0NJ/wBVL/vD+VXJ/wDUmjR4IzDLlf4h39qvvbQlMFP1oAxqza6b7HB/c/U1jfZ4v7v60AX9M/48E+p/nW3o/wDrpf8AdH8652GR4YwkZ2qO1amj3MvnS/P/AAjt70AdKv3hUtULWaSS8iR2yrOARit37PF/d/WgDstN/wCQVaf9cU/9BFWagsQBp1sB0ES4/IVPQBn6+2zw3qbddtpKf/HDXiP9oD/nmfzr2zxGceFtVJ6fY5v/AEA14H5sf98UAVroebdyuONzZx6VSuroWRUFC+8Z4OMVckkTzG+YdaxtbniV4dzgcGgDQ0vVVk1OFRCRknnd7Gul+1j+4fzrhNGuYf7Yg/er1P8AI11n2qD/AJ6rQA4zfMfl7+tYWs3oivlXyyf3YPX61qG4iyf3i1zfiC5gGpLmVR+7H8zQAjXwkGPLI79aEmzIg29WA6+9Z8VxC74SRScdBVmJ186Pn+MfzoA7I2Rz/rB+Ve0+AE8vwNp65zjzOf8Ato1eQFhk817F4FOfBVhj/pp/6MagDoKzPE032fwnq8xG4R2Mz4z1whNadY3jBgvgbXWY4A064JPp+7agD5+/4S1P+fN/+/g/wrmL+8FzqE84QqJHLYznFQ/bbb/nstH2eab95FGzo3KsO4oA3vDMP2qK5IO3ay9Rnsa6C3tDBcJIXDbe2KyPCMEsUN35kbLllxn6GugciJC8h2qOpPagCcTcj5a4ya9Ank+Q/fPf3rphf2uR+/T864+VWM8hAyC5I/OgDVs4PtsBlDbMNtwRmtzw9YmLVC3mA/u2HT6VnaBZ3E2nM0ULMPMIyPoK6HSraa2vC88bRpsIy3rQBqSRYic56KT+lciNRGP9Ufzrr5ZY/Ik+cfcP8q8/EseB84oA98+H8nm+BdPcDGfM4/7atXSVy/w4Ib4f6aQcj97/AOjXrqKAMnxXx4N1r/rwn/8ARbV8y+Z7V9M+LDjwXrZP/QPn/wDRbV8wean94UAaUZzEp9q0LCcRRuCucn1rOh5gQjptq1bsFVtxxzQBbu70LbsfLPUd6of2iP8Ankf++qdeuv2VvmHUVm719aALe/2qRJML0qvuHrUiHK0AWopMk8U9n+U8dqhgUszbRnipWjfaflPSgCLdX0V4Z/5FLSP+vGH/ANFivnXafSvonwz/AMilpH/XjD/6LFAGpXNfEI48B6if+uX/AKNSulrmPiMwTwBqJY4H7rn/ALapQB4n5ntS/ax/cP51W+0Q/wDPRaKAEuT5828ccYxTI4NzY3Y49Kk8t25VSRUsEMnmfcPSgBiWxDqd44I7VseZ7VSEMmR8h61ZzQBSuZcXD8Vn6h++WPtgmrtypNw+BVO5RsLxQBFpkGdVthu/5aDtXYfZD/fH5Vy+lo39rWvyn/WCuz8t/wC6aAPXNCG3w7pw9LWIf+OCr9UtF40HT8/8+0f/AKCKu0AZPitd3gzWl6Z0+cf+Q2r5k+wn/noPyr6d8TKX8JauqjJNjMAPX92a+dfsF1/z7v8AlQBt6foLSabbv9oUbowcbK1bG2OmRujN5vmHdkDGKs6XbzLpNqDGwIiGRUeoSx2siLcuIyy5AbvQBleLrwJ4anOwn507/wC1Xnn9oj/nkf8Avqu08V3MNx4cmjglV3LphR/vVwHkS/3DQBo/2Yf+eo/75rrNBi8jR44yd2Gbn8ax/Il/uGtrTpUhsUSVgjAnIP1oAj1u8FpBCxQvucjg4xxWFcawrW0i+SwypH3qveKLmE2tviRf9Yf5VzLzRuhVXBYjAHrQA77cP+eZ/Ovqzwe27wPoTdM6dbn/AMhrXyV5Un9w19aeDRjwJoIPX+zbf/0UtAGzWX4nbZ4R1dsZ22Mxx/2zNalZXioZ8HayB1+wT/8AotqAPnX+0x/zyP8A31VKWTzJWfGNxzijypP7hqQWVyygrA5B6GgCWysjdo7Bwu045Ga0LLRWku1Xz1HB/hp+i6fdmGXFu/3h29q27CyuUvFZ4HAweT9KAKv/AAjj/wDPyv8A3wf8a0f7Ib/nsP8Avmr/AJMn9w037VB/z1WgDMkj+zOYid2Oc1R1C6FvGhKFssR1q1qF9aresDOgOB/KsbVru3khi2TK2GOcfSgBs2qqIX/cnp/erP8A7YX/AJ4t/wB9VHLLG0LqrgkjgVR2t6GgD6h8Lv5nhHR3xjdYwHHp+7FalZHhP/kS9E/7B8H/AKLWtegChrwz4c1IetpL/wCgGvE/I/2v0r23XBnw9qIHX7LL/wCgGvGvKk/uGgDj76bZqE67c4cjOarsPtHI+XbxUmpjGq3QPXzTUMUiIDvYDJoAv6NbH+1I/m/hbt7V0v2Y/wB79K5/Q5Ek1aNUYE7W4H0rqdjf3TQBVxWVfXIivGQoTgDnPtWvsb0Nc9q7qmpOrEA4Xj8KANDSj9tlkUfJtUHnnPNasenEyqPMHX0rI8Mur3VxtOf3Y/nXSxf65PrQAn9lN/z2H/fNetaMnl6DYJnO22jGf+AivNsivS9K/wCQNZf9e6f+gigC3WT4sXf4L1pemdPnH/kNq1qy/E6l/COsKoyTYzAD1/dmgD5f+wn/AJ6D8q37SLbZwrnOEFVPsF3/AM+7/lWjDGyQIrKQwXBB7UAamkLthl/3h/KtHbu46Vm6dNHDG4lcISwxnvV6K6geQBZVJ9KAJPI/2v0rG+yH++Pyrc81P7wrN2N6GgDLnl+zzGMjdjvVjTtSEEjkxFsqB96qWosFvnDHBwOPwqGCaNWO5wOKAOqsNZV9St18hhmQD71db9uH/PM/nXm+nXduup2xaVQBICTXY/2nZf8APzH+dAHqGntu0y1bpmFD+gqxVTSmV9GsnQ5VreMgjuNoq3QBmeJf+RT1f/rxm/8AQDXzxX0J4rOPBmtEcH+z5/8A0W1fMfmSf32/76NAGg4+c/WsHxF/rLf/AHW/mKSaaXzn/eP1/vGsjWJZC8OXY8HqaALmj/8AIXg+p/ka6vFcDpcjjU4fnbqe/sa6XzZP77f99GgDWrl/En/IUX/rkP5mtLzH/vt+dcx4jkf+01+dv9UO/uaALOn/APHz/wABNakX+uj/AN8fzrl9Nkf7X99vunvWujt5ifM33h396APTyOTXsvgP/kSbD/tp/wCjGr52M8uf9a//AH0a+gPhmxb4daYWJJ/e8k/9NXoA6qsPxx/yT7xF/wBgu5/9FNW5WL4z58B6/n/oG3H/AKKagD40rstM/wCQVbf9cxWD5af3F/Kuz0uNP7JtfkX/AFY7UAX9A/1c/wDvL/Wrmqf8gub6D+Yqiv7v/V/Jnrt4zVfUZH/s+X526Dv70AUKrE8n61AXbH3m/OusigiMMZMSZ2j+EelAGj4O/wCQI/8A13b+Qran/wBX+NR+Ho0XTWCooHmnoPYUeIyY9KBj+U+avK8etAEMo/cSf7h/lXnw6Ct1p5djfvX6H+I1i0Ae/fDL/knWmf8AbX/0a9dXXK/DP/knemf9tf8A0a9dVQBj+L/+RI1z/sHXH/otq+V6+qfFn/Il63/2D5//AEW1fL+0eg/KgDRtv+PWL/dFTrSW4H2aPgfdFRXRKsu0447UALef8erfUVnU+6dvs5+Y9R3qhub1P50Aa1TR/wCrFJgeladkiG1UlVJyeooAhsvvv9KtP9xvpRIoUDaAPoKicny257UAR19C+Gv+RT0n/ryh/wDQBXzrk+tfRXhn/kUtI/68Yf8A0WKANOuU+J3/ACTnVP8Atl/6OSurrlPib/yTnU/+2X/o5KAPnytNfuj6Vmmt9UXYvyjoO1ADLf8A1f41Zg/1n4VcsY0Nvyin5j2qaREVeFUc9hQBVPQ1DVwAZHHerPlp/cX8qAOfmP75qq3HRa6GWNPNb5F/KqGoogWPCqOT0FAFLS/+Qta/9dBXaVyVgANQgwB98V0+T60AeuaP/wAgOx/69o//AEEVcqlo3/IBsP8Ar2j/APQRV2gChr3/ACLmpf8AXpL/AOgGvE69u1rnQdQz/wA+0n/oJryLYn91fyoA2bD/AJB1v/1zFc14x/4/LX/rmf51d8x14V2AHQA9K5jxXLIbu2zIx/dn+I+tAGbqX/Hg/wBR/OsTNalsTJOFcllweG5FXfJi/wCeaf8AfIoAlpD1rR2L/dX8q5vWZHTVJFR2UbV4Bx2oAreJ/wDj1t/+uh/lWBB/r0/3q0L12dEDsWweMnNQ2iqbyHIH3x2oAsZr6p8If8iRof8A2Drf/wBFrXzd5Uf9xf8AvkV9KeFhjwfowHT7BB/6LWgDVrL8T/8AIo6x/wBeM3/os1qVneIRnwxqgP8Az5zf+gGgD5wrWt/+PaP/AHRS+Wn9xfyrQhRfJT5V6elAFzQ/9RN/vj+Va8f+sFZFr8qtt+XntxTriR1gJV2ByOQaANsjg1y5HJoNxNg/vZP++jXMefN/z1k/76NAFjVf+Qi/0H8qy7v7q/WppHZnJZiT6k1NZKryOHUNx3GaAMpT8wqXNbyQReYv7pOv90VZ8iH/AJ5R/wDfIoA9y8Kf8ibov/XhB/6LWtas7w8APDGlgDAFnDgD/cFaNAFLWf8AkBX/AP17Sf8AoJryWvWNd48O6lj/AJ9Jf/QDXiu9v7zfnQByerf8hm7/AOurVnS/eH0purO/9s3nzN/rm71FASytuJPPegDa8Mf8jBD/ALj/AMq7quN8GgN4ogBAI2P1H+zXpJjTB+RfyoAwK5DxB/yGpf8AdX+VdLuOTyfzrk9dJ/tiTk/dX+VAGt4Q/wCPy6/65j+ddZH/AKxfrXHeECftl1z/AMsx/OurUneOT1oA0q9O0n/kC2X/AF7x/wDoIryfcfU/nXq+j/8AIDsP+vaP/wBBFAFys/X/APkW9T/69Jf/AEA1oVU1YA6LfAjINvJkf8BNAHhmarv99vrXVeTF/wA8k/75Fc5eAC+mAAADngCgCo/WpbL/AI+1+h/lVDUWKyR7SR8p6GorKR/ta/O3Q9/agDqKSszzH/vt+dXMn1oAwdZ/5Ckn+6v8qoGr+qc6g+fQfyrLvCQi4OOe1AFq0/4/Iv8AfFb2D6VxyO4cEOwOfWp/tE3/AD2k/wC+jQB9O+H/APkWdM/684v/AEAVoVleFST4N0Yk5JsIMk/9c1rVoAr6hZR6lpl1YzlliuoXhcoQGCspBxnvzXB/8KV8O/8AP7qn/f2P/wCIr0SigDzZvgZ4adixvtVyT/z2j/8AjdVrn9n/AMLXRUyX+sDb02zRf/G69SooA8rg/Z78KW86ypqGsll6AzRY/wDRdXf+FIeG/wDn91X/AL+x/wDxuvR6KAPOP+FIeG/+f3Vf+/sf/wAbqje/s9eFL+cSzahrKsFC4WeLH/ouvVaKAPJoP2dPCVvJvTUdaJxjmeL/AONVZHwB8LBgRf6xwc/66L/43XqFFAHn3/CmfD3/AD+an/39j/8AiK7HQtGt/D2iwaXZPK8EG7a0pBY7mLHOAB1J7VoUUAFVdTsItV0m70+4Z1hu4HgkZCAwVlKkjOecGrVFAHmX/ChvDH/P/q//AH+i/wDjdadv8JNBt7eOFLvUSsa7QTJHn/0Cu6ooA4n/AIVVof8Az9ah/wB/E/8AiKjm+EmhTwtG93qIDdcSR/8AxFd1RQB51/wpLw5/z+6p/wB/Y/8A43Wkvwv0VUCi6v8ACjA/eJ/8RXZ0UAc1Z+BdMsoTFFPdlS275nXP/oNJfeA9M1C38mae7VdwbKOoP/oNdNRQBxB+FOhkEfatQ/7+J/8AEVX/AOFOeH/+fzUv+/sf/wARXf0UAZ+h6Nb+H9Fg0yzeV4YN21pSCx3MWOcADqfStCiigCvqNlHqWl3VjOzLFdQvC5QgMFZSDjPfmuD/AOFK+HP+f3VP+/sf/wAbr0SigDg0+EOgogUXepYUYGZY/wD4imyfB7QJSC15qXHpLH/8RXfUUAeeSfBbw7IhVr3VMe0sf/xFQ/8ACjfDX/P9qv8A3+j/APjdek0UAcD/AMKe0D/n81L/AL+x/wDxFTxfCrQ4Ywi3WoED1kT/AOIrt6KAOKb4WaI3W61D/v4n/wARTD8KNDII+1ahz/00T/4iu4ooA4T/AIVHoP8Az96j/wB/Y/8A4iu0sbOPT9OtrOEs0dvEsSFzkkKABn34qeigArP13RrfxBos+mXrypBPt3NEQGG1gwxkEdQO1aFFAHn3/CmvD3/P5qf/AH9j/wDiKuD4W6IAB9qv+B/z0T/4iu1ooA5GH4b6RCm1bm9IznmRP/iac3w70lhg3F7/AN9p/wDE11lFAHJf8K40j/n5vf8Av4n/AMTUn/CvtK/5+Lz/AL7X/wCJrqaKAOSb4c6QzEm4vf8AvtP/AImoZ/hhos4XfdX429MSJ/8AEV2dFAHFRfCzRIZkkW61AlTkZkT/AOIq9/wgOl/897z/AL7X/wCJrp6KAIrW3W0tIbeMsUhRY1LdSAMc1LRRQBFc263dpNbyEhJkZGK9QCMcVzv/AAgWl/8APe7/AO+1/wDia6eigDlz4A0s/wDLxef99r/8TVDUPhToepSI891qClBgbJEH80rt6KAOAj+Dnh+KQMt5qWR6yx//ABFTf8Kl0L/n71H/AL+J/wDEV3NFAHG/8Kx0b/n5v/8Av4n/AMRVC6+DXh67uDNJeamGIAwsseOP+AV6DRQB5tJ8DPDUgAa+1bj0mj/+N02P4FeGYpVkW+1YlTkZmi/+N16XRQBwP/CnfD//AD+al/39j/8AiK7aws49O022soCzR20KQoXOWIUADOO/FWKKACoby1S+sZ7SUsI542jYqeQGGDj35qaigDjf+FYaL/z83/8A38T/AOIqVfhzpCqFFxe4Ax99P/ia62igDlk+H+lIDi4vOfV1/wDiaJPh/pUibWuLzHs6/wDxNdTRQByP/Ct9I/5+b7/v4n/xNUP+FP6B/wA/epf9/Y//AIiu9ooA4E/B3w+T/wAfmpf9/Y//AIinw/CPQYWJW71E5GOZY/8A4iu7ooA4ofCzRAwIutQ4/wCmif8AxFP/AOFY6N/z833/AH8T/wCIrsqKAIbO1SysYLWIsY4I1jUseSFGBn34qaiigCG7tkvLKe1lLBJ42jYr1AIwcfnXL/8ACt9I/wCfm9/7+J/8TXXUUAec3HwS8OXN1JPJe6oGkYsQsseM/wDfukT4IeG4wQL3VefWWP8A+N16PRQBwumfCTQtK1BLu3u9RaRAQBJIhHIx2QVuf8IhYf8APa5/76X/AOJreooA5H/hW2j/APPzff8AfxP/AIms67+Dvh+8uWmlvNSDMACFljxx/wAArv6KAOH034T6Fpckj293qDGRQp3yIf5IK0B4A0sHP2i8/wC+1/8Aia6iigDmf+EE0z/nvd/99r/8TXQ20C2tpDbxklIkVFLdSAMc1LRQAVHcQLc2ssEhIWVCjFeoBGKkooA57/hC9O/57XX/AH2v/wATVGX4a6PLM8jXN8CxycSJ/wDE119FAHDz/CjQ7hgXu9QGBjiRP/iKbF8JNChkDrd6iSPWRP8A4iu6ooA43/hWGi/8/N//AN/E/wDiKl/4VxpH/Pze/wDfaf8AxNdbRQBw8/wn0K4mMj3eoBjjpIn/AMRVeX4N+HpQA15qYx6Sx/8AxFegUUAedj4KeHAf+P3VP+/sf/xunf8ACl/Dv/P5qf8A39j/APiK9CooAr6fZR6bplrYwFmitYUhQucsQoAGcd+KsUUUAFFZPiuaW28G61PbyPFLHp87pIjFWRhGxBBHQg96+ZP+Ex8Tf9DHq3/gdL/8VQB9Y0V83WfijxA1jCza5qRJQZJu5Of1pZvFGvgjGuakPpdyf40AfSFFfNJ8VeIcf8h3U/8AwMk/xpv/AAlXiH/oPan/AOBkn+NAH0xRXzP/AMJV4h/6D2p/+Bkn+NWLfxRr5j51zUjz3u5P8aAPpCivnQ+J9e/6Deo/+Bcn+NA8T69uH/E71Hr/AM/cn+NAH0XRXgv/AAkWtf8AQYv/APwKf/GvXPBFxPd+DrGa6mknlbzN0kjFmOJGHJPtQBvUUVQ16R4fDepSwu0ciWkrK6nBUhDgg9jQBforwP8A4SLW/wDoMah/4FP/AI1zV/4t8RpqE6pr+qKocgAXsgA/WgD6hor5v0HxRr80c/na5qUmGGN13IcdfetG58R64tu5XWdQB9RdP/jQB7/RXzj/AMJPr/8A0HNS/wDAuT/Gro8Sa5tH/E51Dp/z9P8A40AfQNFfPreJNcz/AMhnUP8AwKf/ABp0PiTXC/Os6geP+fp/8aAPoCivBG8Ra3sb/icX/Q/8vT/41hf8JV4h/wCg9qf/AIGSf40AfTFFcz8O7u4vvAOnXF7PLcTv5u6WVy7NiVwMk89ABXTUAFFQ3jFbGdlJBEbEEHpxXKfbrv8A5+Zv+/hoA7GivLrvV9SW9mVdQugA5AAmbj9a8t+Kni3xHp2q6amn+INUtVe3cssF7IgY7upweaAPqOivi3S/HXi6TUEWTxTrTLg8NqMpHT/erdHjLxPkf8VHq/X/AJ/pf/iqAPrWivEBr+sYH/E2vun/AD8v/jWbeeJNcW6YLrOoAYHAun/xoA+gaK+eB4m13/oNaj/4Fv8A40f8JLrv/Qa1H/wLf/GgD6Hor55/4SXXf+g1qP8A4Fv/AI17r4elkm8M6XLM7SSPZxM7ucliUBJJ7mgDRoorE8Y3E1r4TvJraWSGVdm142KsP3ijqKANuivEf7f1j/oK33/gS/8AjUf/AAkGs/8AQWvv/Al/8aAPcqK8RTX9YK86rff+BL/41X1DxDrSWwKavfqdw5Fy4/rQB7tRXzrJ4m14RORreo52n/l7k9PrXPDxh4lx/wAjDqv/AIGyf/FUAfVdFfKw8X+Jcf8AIw6r/wCBsn/xVW7HxZ4idn36/qjcDreSH+tAH09RXzcPFHiDP/Ic1L/wLk/xpf8AhKNf/wCg5qX/AIFyf40AfSFFZvhyWSfwtpUs7tJJJZQs7ucsxKAkk9zWlQAUVS1qR4tA1CSJ2R0tZGVlOCpCnBBrx/8At7WP+grff+BL/wCNAHttFeOJreqmNc6nedP+fh/8ahudd1dWXbqt6OO1w/8AjQB7TRXgmqeItbj092j1i/Vsjlbpwev1rC/4SrxD/wBB7U//AAMk/wAaAPpiivnb/hJte/6Deo/+Bcn+NL/wk2vf9BvUf/AuT/GgD6Ior5m1jxX4hihiMWvamhLHO28kGePrWbb+L/ErXMYPiHVSCwyDeyf/ABVAH1XRXzV/wlPiD/oO6n/4GSf419B+G5ZJ/CukzTyNJLJZQs7ucsxKAkknqaANKiis/X5Hh8N6nLC7RyJaSsrqcFSEOCD2NAGhRXgH/CR65/0GdQ/8Cn/xrQh1/WDChOrXxOP+fl/8aAPb6K8LufEGsqy7dXvxx2uX/wAarSeI9bEZxrGoD/t6f/GgD32ivnseJddyP+J1qHX/AJ+n/wAa7carqOB/p910/wCezf40Aem0V47fa3qqXjBNTvFGBwLhx/WqNxr+sKq7dWvhz2uX/wAaAPcKK8KTxDrJkXOr3/X/AJ+X/wAatf29q/8A0Fb3/wACH/xoA9roqlosjy6Dp8krs7vbRszMcliVGSTV2gAorO8QyyQ+GdUlhdo5Es5WR0OCpCEgg9jXhX/CS67/ANBrUf8AwLf/ABoA+hqK+bpPFHiASNjXNS6/8/cn+NC+KPEH/Qc1L/wLk/xoA+kaK+dbXxNrzXADa3qJGDwbuT/Gr3/CRa3/ANBjUP8AwKf/ABoA98or5x/4SfX/APoOal/4Fyf404eJ9ex/yG9S/wDAuT/GgD6Mor50/wCEn17/AKDeo/8AgXJ/jU9l4l117+BW1rUGUuAQbp+f1oA+hKK8g/trVf8AoJ3n/gQ3+Nep6Q7y6JYySMzu1vGWZjkklRyTQBcooqK6JWzmKkgiNiCO3FAEtFcv9ruf+fiX/vs15xrOv6xFrl7HFq18iLMwVVuXAA9hmgD2+ivni88Ta6rrt1rURx2u3/xrR8I+IdaufEsEVzq9/LGUclJLl2B+X0JoA92orjDfXe0/6VN0/wCehryQ+KNf3H/ieal1/wCfuT/GgD6Oor5jufFfiJbghdf1QDA4F5J/jWXqvjHxNHFGY/EWrKSxztvpR2/3qAPrCivjt/G/isI2PE2s9P8An/l/+Kqt/wAJz4t/6GjWv/BhL/8AFUAfZtFY3g2ea68C6DcXMrzTS6bbvJJIxZnYxKSSTyST3rZoAyfFaCXwZrSE4DafOCR7xtXzH/YsX/PaT8hX0/4kUv4U1ZV6tZTAf98Gvnz+zbr+4P8AvoUAZ8X7iJYl5CDAJ70yeU5XgVLMhjmdH4ZTg1DJG0mNgzj3oAjVy7BTxmpPLHrRDbSmVcKPzq19km/uj86AKm2p4Plj/GkNvLnoPzqSOF1Xkd/WgBy/McU4Lg5oVGB5FP2mgB/2xv7q17j8O3MngLTmIxnzf/Rr14Nmvd/hv/yT/Tf+2v8A6NegDqKy/FDmPwhrDgZK2M5wf+ubVqVkeLSF8Fa2T0Gn3B/8htQB85f2xL/zyT8zWXcDz7iSVuC7ZIHam/aYvU/lU6QSSIHQAqwyOaANPw9EBHccn7y/yNaV2mLVz9P51R0RTAkwk4yRjvV66cNauB1P+NAGXWulspRTuPQVklDiuhjtpfKT5R90d/agCjJAA33j0qNh5A3LyenNXpraUP0HT1qnextFb7pOBuAoAia5YqRtHSsryx61bMqYPP6VV3CgD3/4ZjHw60wf9df/AEa9dVXK/DPn4d6Z/wBtf/Rr11VAEN2N1lOPWNh+lct9lX+8a6u5GbWUDqUP8q5/yJPT9aAOD1Fymp3KgZCyEV4/8YZj/bGl8D/j2f8A9Dr1/VQRrF2D1ErV438YiBrGl5/59n/9DoA47R5j/acfA+638q6MSnI4HWuX0ZgdUjA/ut/KulAOR9aAPVgeB9Kyb9v9Mb6D+VaoHA+lZd9Gxu2IHYd/agCKEeYxB4wO1TiAFgNxpltE4ZuO3rVlY2DDjvQA37Iv941774cG3wtpQ9LKEf8AjgrwrFe7eHv+RY0v/rzi/wDQBQBo1zvj19ngi/YDOPL/APRi10Vc38QePAuof9s//Rq0AeOfa2/uiovtbf3VqPcKrmZM9f0oA0orpin3R1ps5+0R7G+UZzxVWK6iVMFj19KmhlSd9sZycZ6YoAhks18p/nb7p/lXNiwTH32/KuweFzGwA6g96w/7Ouf7g/76FAHPXD+RO0ajIXuav6N+/ebdxgDpVPUbaVNQlVlGQRnn2q7oamOSffxkCgDSeEJGWBJwM1X80+gq1Mw8l/pVGgD6Y8LHPg/Rj/04Qf8Aota1ayvCv/Im6N/14Qf+i1rVoAzvETbPC+qsOdtnMf8Axw14J/aD/wBxfzr3rxGC3hXVQOpsph/44a+f/s0voPzoA6W0jEtnDISQWQHAqvfoI5Ewc5FWbJ1SwgVjyEANVtSkUyR4P8JoAytRQSWLqTjkfzrG+yL/AHmrbu/ntmVeTkVn+U/p+tAFfefSopLpkcqFBo8xfWq8pBkJFAFXVrlpIYgVAwx/lVG0bdewg93FWtQQvGm3+9VezhcX0JI4DjvQBv8Akj1NfSHhcY8IaOPSxg/9FrXznX0Z4Y/5FHR/+vGH/wBFigDUrN8R/wDIrar/ANeU3/oBrSrO8RDPhfVQP+fOb/0A0AeAYq/E2IUHtVTyn9P1qZZkRQrHkDB4oAbdud68dqqu+UIp15dRB1yx6elV/tEb8KTn6UAOHUfWuyF62B8i9K4vcM10/wBojx1P5UAVdQvGN63yr0H8qpTXDOBlQMGk1C6hF62WPQdvaqpuYm6MfyoAsJKRIvA61a+0N/dFZyTIZFAPOfSrW4UAe8aAc+GtMPraRf8AoArQrO8Pf8ixpf8A15xf+gCtGgDL8UHb4R1g+ljOf/IZr5w+1t/dFfR3igZ8H6wB1NhP/wCi2r5u8iT0/WgBCdzFj35prOUPAzmpBE4HT9ar3LCJlEnBI4oAmiumjkDBQan/ALTk/wCeafmazRPHnqfyp3nx+v6UAP8Atjf3Vq1BIZIQxGKyvMX1rUskMlorL0yf50AWYYxIxBOMDtVq2hEd3E4JJVgcVDboys2R2q3CMzp/vUAa32tv7or2fQju8O6cfW1iP/jgrxLY1e26Dx4c03/r0i/9AFAF+obv/jyn/wCubfyqaobw4sZyegjb+VAHMV5Pr85XxHqA2ji4b+deqefH6/pXkniBwfEmoEf8/DfzoAoTfv2BbjA7Vt+CoAfFdvyfuSf+g1jRo0gJQZxW/wCDkaHxRA8nChH/APQaAPRzbrtPzHoa8OJ+Y/U17kbmLaeT0PavDD94/U0AV5oRJKWJIrM1e1UwxfMfvH+VbJQk5FUNUgd4o9o/iPf2oA5y4txHbSOGJKqTWP55/uiuivbaUWM5IH3D3rm/Kf0/WgD7V8CnPw68OH10q1/9FLW9WD4EGPhz4bB/6BVr/wCilreoAoa9/wAi5qX/AF6S/wDoBrxOvbdc/wCRf1H/AK9Zf/QDXjlAHIX3/IQn/wB81HH0NXr/AP5CE/8AvmnWY+V/qKAK1v8A69au1ZgA85eKu4HpQBgHqfrSitUjk8d6co46UAZFB6GtG7H7j/gQqjQBTr3n4b/8k+03/tr/AOjXrxKvcPh5/wAiHp3/AG1/9GvQB0tY3jD/AJEbXf8AsHXH/otq2axfGX/Iia9/2Dbj/wBFNQB8pVu2f/HlF/uiucruNJH/ABJ7Tj/lkKAGWX3X+oqab/UtVginJ98UAZR6V1cX+pT/AHR/Ks7A9BWqn3F+goArT/6z8KzNY/48R/vitiX7/wCFZGv/APIMH/XRf60AYJqOmU2gD6F+GX/JOtM/7a/+jXrq65P4Yf8AJONL/wC2v/o566ygBk3/AB7yf7p/lWRWtP8A8e8n+4f5VjUAee6x/wAhu9/67NXi/wAZf+QzpX/Xs/8A6HXrmt/8h6+/67t/OvGfjF/yGNL/AOvZ/wD0OgDktD/5C0f+638q6odR9a5bwr/yMUP+4/8A6DXegcjjvQB6COg+lULv/j4b6CujA4HHasjUP+P1voP5UAUrf7zfSpx1pE6mlf8A1bfSgB1e6+H/APkWdL/684v/AEAV8/V9AeHP+RV0r/ryh/8AQBQBpVzfxC/5ETUP+2X/AKNWukrn/HX/ACJd/wD9s/8A0YtAHhtZ5+8frXQ1ht99vqaAIx0q9pX/AB+H/cNZ8v3/AMKsab/x9H/cNAG8fun6VUp6ffX6itXHtQB57rH/ACFp/qP5CnaX96X6CtbVwP7Wn47j+QqonegB8v8Aqm+lU6tP/q2+lQUAfSvhX/kTdF/68IP/AEWta1ZXhX/kTtG/68IP/Ra1q0AZ/iD/AJFnU/8Arzl/9ANeF17trn/Ivaj/ANesv/oBrxqgB8H/AB7x/wC6Kqah/rE/3TWfcE/apOT9496YpoAml/1ZqvTz0ptAGHUbfep1IaAK1191frUdt/x9xf7wqe4+6v1plv8A8fMf+8KANevozwx/yKOj/wDXjD/6LFfOdfRnhj/kUdH/AOvGH/0WKANSs/xB/wAizqf/AF5y/wDoBrQrO8Q/8izqn/XnL/6AaAPDKqSf6xvrVioW+8aAM6+/1ifSoYf9aKm1L/WR/wC6f51Baf8AHyv0NAFqt2sitOgDJ1L/AI/n+g/lVZap66T/AGvJz/Cv8qgsj8789qANmH/Xp/vVo1iQf8fEf+8K1KAPoDw7/wAivpf/AF5w/wDoArRrN8Of8irpX/XlD/6AK0qAMzxN/wAilq//AF4zf+izXztX0T4l/wCRT1f/AK8Zv/QDXzxQAyszVf8AWx/7p/nWwOlUdQ/1if7poAyF+9T6nk+4ahoAhrf0r/kHp9T/ADrNrTsv+PVfqaALqdTU8H/HxH/vCqVTWn/H5D/vigDbr2jQv+Rd07/r1i/9AFeN17Lof/Ivad/16xf+gCgC9UF//wAg65/65N/I1PVbUv8AkFXf/XF//QTQBxleVa7/AMjDf/8AXdv516RXm+s/8hy9/wCuzUAMsvuP9a3/AA1/yHof91/5Vjad/q5P94Vr6X/yEE+h/lQB3B+6foa8aP3j9TXpRJweT09a8tPU/WgCyOlVb/8A1afWpU+7TZeg+tAGPf8A/IPuP+uZrlq7TUP+Qbcf9czXIUAfZPgb/knnhz/sFWv/AKKWt2sLwP8A8k98O/8AYLtv/RS1u0AUNeOPDmpEdrSX/wBANeKee/t+Ve1eIDjw1qZ9LSX/ANANeG+evoaAM26G67lY9S1WNPhRlkznqO9Vp2BuJD/tVa0+QIsmQeooAuCJUO5c5HvS7zUUtyqRMxDYHpVb+0ov7j/pQBd2A05UGKo/2tD/AM85P0pRrEA/5ZyfpQBJqA2WuR/eFZnmGrN1qEd1D5aK4OQeap0AO8xv8ivdPh0c+AdOJ/6a/wDo168D+0p6NXvXw2YP8PdNYdD5v/o16AOorH8XAN4J1wHodOuAf+/bVsVkeLf+RL1v/sHz/wDotqAPlf7JF6N+dddpqBdLtlHQRjFcziuo08f8S23/ANwUAWQgPWlCAHIpjSCP7wJz6Un2pBzhqAJ6lF5MBgFePaqX2xP7rVAdUhBPyP8ApQBrLO8gy2M/SszxDIw0sY/56L/WrFrdpNCWVWAzjmqPiGUf2WOD/rF/rQBz3mv7flS7zUIkGR1qz5LeooA+hPhcc/DbS8/9Nv8A0c9dbXJ/C8bfhvpYP/Tb/wBHPXWUAR3Jxaykf3D/ACrnvNf2/KuguziynPpG38q5jz19DQB5trlxIPEF/wBP9e3b3rx74tyNJq+mFu1u/wD6FXqmvXaDxFqA2t/r2/nXk/xRcXGqacU4xAw5/wB6gDn/AAcgk8UQK3TY/wD6DXpAtYsjg9fWvPfBEDP4tt1BGdkn/oJr1EWMmR8y9aAO/ESYHXp61haoNuouB0wP5V0YjOByOlczrUgj1WRSCTtXp9KAK28r0pHlbYenT0qIzqexprSjaeD0oATea+g/Df8AyKmk/wDXlD/6AK+d/NHoa+iPDJz4T0g/9OMP/osUAadc947OPBN//wBs/wD0YtdDXO+Pm2+B9QJ/6Z/+jFoA8d3GqBgQsevX1qz5y+hpPLJ7igDNuYlWXAz09aW1PlzFl64xTrxds+D/AHRTIP8AWfhQBeS4k8xeR1HatsyGufQ4dT7itf7Uno1AGFqvOqTE+o/kKqDirWofvNQlYcAkdfpVcIaABRvYKeh4NSfZY/Q/nSIhEi/WrGKAPoTwwNvhHSAOgsYR/wCQxWpWZ4a/5FPSf+vKH/0AVp0AZ3iFinhjVGXqtnKR/wB8GvCP7Qn9V/75r3TxO4j8I6w55C2MxOP+uZr5z/teD/nnJ+lAE013KZ3JI+96VasCZ43MnUHAxxWaWEp8xeA3IzV7T5hFG4YE5PagCe9/cWrPH94EdeazPts3qv8A3zVvVb2NNOdirdR/OsD+04v7j/pQAvmN/kU9SSuTVP7Un91quW486AOvAJPWgBsihgM0QxqJkIzkH1qV4iMcikRCrgnsaALua+jfDH/Io6P/ANeMH/osV82+cvoa+kfC5z4P0c/9OEH/AKLWgDVrO8RHHhfVT/05zf8AoBrRrM8SHb4U1YntZTH/AMcNAHgvmt7flUyxqyhjnJGTzVD7Uno1aUPzwIw6Fc0AZupQp5kfX7p7+9VoY1SQMuc/WtDUIy0iYI+7VPYY/mOMe1AEm41e81/b8qzvMHoak+3x/wB1qAOd8QXMg1qUDH3V7e1VbO6lDtyOnpTdfukbWZSFb7q/yqraXKb24bpQBt291KbqPkfeHatj7RJ6j8q5y1uFa8iAB5cVu7qAPo7wyc+E9IJ6mxh/9FitOsvwx/yKOj/9eMH/AKLFalAGV4pJXwfrJHUWE5/8htXzb9qk9R+VfSXikZ8H6yPWwn/9FtXzb9nb1FAGpBGr28bN1ZQTVa9t4zImc9PWtaz02VrKFg6YKD1qC/sJEkTLLyKAMV7WMr0P51H9ki9D+daMlo6oSWWofs7eooAqeSnv+dW4PkhAXpk1XzVy3gaSAMCAMnrQAhkYdKls5GN7D0++O1L9ikfoy1NbWMiXUTFlwGBoA29xr2fQv+Rd07/r1i/9AFeL4r2jQv8AkXdN/wCvWL/0AUAX6q6mcaReH/pg/wD6CatVV1XjR7z/AK4P/wCgmgDzrzW9vyrznWZG/ty9/wCuzV6DvFecazMBrl7wf9c1AFvSyWikz/eH8q1rJjHdKy9cGsXSJQYZeD94fyrWt5AJwcHoaANY3UuDyOnpXmplbJ6dfSvQDOuDweleam7TJ+VutAFn7RIvAx+VAmd/vY49qgVxIu4cD3pTIIuWBOfSgBNQY/2bcf8AXM1yWa6a+uVOnzjDcxmuW3igD7N8D/8AJPfDv/YLtv8A0UtbtYXgbn4eeHf+wVbf+ilrdoAzvEXHhfVM/wDPnN/6Aa8F3r/eX86948Tf8inq/wD14zf+izXzvQA+Vl85/mHX1qa0kQK+XUcjqazJP9Y31oWgDXupY/sz/Ov/AH0KzfMT++v51XuP+PdqoUAaRniz/rU/76FJ9oh/57R/99CucYfMfrUMg+b8KAOshmjd8JIjHHQMDUxYbTyOlc3oo/4mB/3DW633G+hoArb0/vr+dfQXwxIPw50wg5H73/0c9fNQ6V9IfCn/AJJjpP8A22/9HPQB2FZHiz/kS9b/AOwfP/6LatesnxX/AMiZrX/YPn/9FtQB8v4PpXU6eD/Ztvx/AK5uup0//kG2/wDuCgCO54K54qu7KEJJAHqTU9/96P6Gs29/48pPw/nQBN50f/PRP++hVM/eP1rNxWmv3F+lAGnpv/Hqf981W8QnGljP/PRf61a07/j1P+8ap+Jf+QSP+uq/1oA5xWG4cjrWrsb+6fyrDT/WL/vD+ddUetAHuXwzGPh1pmf+mv8A6NeuqrmPhz/yIGm/9tf/AEa9dPQBDe/8eFx/1yb+VcjvX+8PzrrNQ/5Bl1/1xf8Aka4agDzPX/8AkY9Q/wCvhv515h8RlJ1GxwCf3LdB/tV6brf/ACH77/ru386888df8f1n/wBcm/8AQqAMbwGjf8JhbfK3+rk7f7Jr1gKcjg9fSvN/A/8AyN1v/wBc5P8A0E16kOooA68EYHI6VyHiAj+2pef4V/lXUDoK5HX/APkNS/7q/wAqAKgOaH+4fpUcX3j9KfJ/q2+lAEORX0b4Y/5FHR/+vGD/ANFivm2vpHwv/wAiho//AF4Qf+i1oA1a5v4gkDwJqBJwP3XX/rqtdJXK/Ev/AJJ3qf8A2y/9GpQB4v5if31/OrgBwOO1c8eldOn+rX/dH8qAMi/B+09P4RUMPD88cVa1H/j6/wCAiqb/AHaALKsu4cjr61e3D1H51jL94fWtCgCrd83T4/zxUagnoKkl/wBa1Oh70ARqCGGQamyPUUr/AOrb6VWoA+jPDX/IqaT/ANeUP/oArTrL8Mf8ijpH/XjD/wCixWpQBkeLf+RL1v8A7B8//otq+Xq+ofFn/Il63/2D5/8A0W1fL9AGlCwECcj7o71ZhljVTudRz3asxPuD6VBc/eX6UAaGszRHS5MSIfmX+Ietc35if31/On6kP9Bf6j+dYtAGzuHqPzrZ07mxXHqf51zldFpH/IMT/eb+dAE8hAAycfWo96/3h+dF9/q0+tUh1oAu7h6j86+l/Cv/ACJui/8AXhB/6LWvl2vqHwl/yJWif9g+D/0WtAGvWX4n/wCRR1f/AK8Zv/RZrUrM8S/8inq3/XlN/wCgGgD5zwfQ1s20iC1iBdQQo4JrNpp60AX7v53Up8wxzt5qrKj+Wfkb8qsWH+rf6irR6UAY3lyf3G/75qtiuhzWDQBymtox1aTCk/KvQe1V7SNy7YRunpWvqf8Ax/v9B/KjT/8AWP8A7tAEFnFIL6HKN98fw10e0+h/KqsH/HxH/vCtSgD6E8Mf8ijo/wD14wf+ixWpWZ4a/wCRT0n/AK8of/QBWnQBmeJhnwlq4HJ+wzf+izXzt5Un9xv++TX0Z4g/5FrU/wDr0l/9ANeG5oAv2CP/AGdb/K3+rHaquqKwljyp+6e3vW7Z/wDHlD/uCs7Wf9dF/un+dAGFMp8o8H8qrbT6H8q0pv8AVmq9AGJg+la1hG7WakIxGTyB71nV0+i/8gmP/eb+dAFRI3BOUYfUVLGrCVcg9fStCf7o+tQ0AOzXs+hf8i7p3/XrF/6AK8Wr2nQv+Rd03/r0i/8AQBQBfqpqv/IGvf8Ar3k/9BNW6qar/wAga9/695P/AEE0AeZV5trQP9u3vH/LZq9KrzvWP+Q3e/8AXZqAH6MD5MvB+8P5VrQKxmGFP5VR0X/Uzf7w/lWzZ/8AH0v0NACFGwflbp6V5iUbJ+VuvpXsB6H6V5gep+tAENvG/kj5G6ntSXIKKu4Fee4xWra/8e4+pqjrn+oh/wB8/wAqAMm8YGxm5H3D3rna27n/AI9Zf901i0AfZ3gX/knfhz/sFWv/AKKWt6sLwN/yTvw5/wBgq1/9FLW7QBmeJf8AkU9X/wCvKb/0A1884r6Q1Oz/ALR0m7st/l/aYHh34zt3KRnHfrXnn/Cnv+o5/wCSn/2dAHlTqN5471FJ8uNvFerH4NZYn+3v/JP/AOzpj/Bbfj/if4/7c/8A7OgDykneNrcg9qQQx5+4K9VHwT/6j/8A5Jf/AGyl/wCFK/8AUf8A/JL/AO2UAeCSOwlcA/xH+dRM7E8mvbG/Z63Ozf8ACT4ySf8AkH//AGymH9nfP/M0f+U//wC2UAeT6CSdSIP/ADzP9K6FgNjfQ16BYfAP7Dded/wkm/5SuPsGP/alaR+DOVI/t7qP+fP/AOzoA8SwK+jvhV/yTPSv+23/AKOeuQ/4UP8A9TH/AOSP/wBsr0fwroP/AAjPhm00j7T9q+z7/wB75ezdudm6ZOPvY60Aa9ZPiv8A5E3Wv+vCf/0W1a1VNVsf7T0a9sPM8r7VbyQ+Zt3bdylc474zQB8t4rs9LhjOk2pKAnyxXS/8KQ/6mD/yS/8Atlbdp8MvstnFB/a27y127vs2M/8Aj9AHl3iH9zJb+V8uVbOPwrCuZZDbuCxIr2PU/hL/AGi0Z/try/LBH/HpnOf+B1Qk+CO+Mr/wkGM/9OX/ANsoA8bJOK6mK2hMKExjJUfyrtP+FE/9TH/5I/8A2ytdPhNtjVf7aztAH/Hr/wDZ0AefQRpHHhFAGayfFXy6MCOP3y/1r1tfhXtGP7Z/8lf/ALOqerfBz+1LIW/9u+V84bd9j3dP+B0AeBwsTcRAnguv869LNjbbj+5WtlP2ftkiP/wk2drA4+wdcH/rpXVn4Z5P/IW/8lv/ALKgDb8DIsfguxSMbVHmYA/66NXQVQ0TTP7H0eCw83zvK3fPt25yxPTJ9av0AVdUJXR7wjgiByP++TXmv2mb/noa9Pu4PtVlPb7tvmxsm7GcZGM1zH/CDf8AUQ/8gf8A2VAHjuqfNq92zckysSa4PxtGjX1plQf3Tfzr6DufhL9oupZv7a2+YxbH2TOP/H6wta+AH9sTRSf8JL5PlqVx9g3Z5z/z0FAHiXgmJB4st8KPuSf+g16f5a+lbeifs+f2Pq0d7/wk3nbFYbPsG3ORjr5hrp/+FXf9Rj/yV/8As6AOX3t61y+t86tITydq/wAq9c/4V5/1E/8AyX/+yrLvfhJ9su2m/tvZuAG37JnoP9+gDyyEDcfpS3Py2shHBCnFemp8HdhP/E9z/wBuf/2dEvwe8yF0/tzG4Yz9k6f+P0AeNedJ/fNfTnhQ58GaKT1/s+D/ANFrXnX/AAoz/qYv/JH/AO2V6hpNj/Zei2Wn+Z5v2S3jg8zbt37VC5xzjOOlAFuuS+KLFfhtqhU4P7n/ANHJXW1keKdC/wCEl8NXWk/aPs32jZ+92b9u11bpkZ+7jrQB8wmaTH3zXVJLJ5a/Mfuj+Vdf/wAKK/6mL/yR/wDtlaq/CXCgf210GP8Aj0/+zoA82lUSPucbjjGTTDDGf4BXph+Emf8AmNf+Sn/2dJ/wqP8A6jf/AJKf/Z0AeZ+TGP4BRk16X/wqP/qN/wDkp/8AZ0n/AAqH/qOf+Sn/ANnQB5g4y5zT4VGW4r0o/B7Jz/bn/kp/9nTk+EGzP/E8zn/p0/8As6APNLj5baQjghayvNf+8a9gl+EPmRMn9uY3DGfsn/2dU/8AhSX/AFMH/kl/9soA9B8LHPg/Rif+fCD/ANFrWrVTSrH+zNGsrDzPN+y26Q79uN21QM47ZxVugDK8UjPg7WQehsJ//RbV81eTH/cFfUGqWX9paPeWPmeV9qgeHftzt3KRnHfrXm3/AApX/qP/APkn/wDZ0AeVBFHQVl6s7RzRCM7cqc4+te0/8KV/6j//AJJ//Z1TvfgP9sdG/wCEj2bRj/jxzn/yJQB4ZdyyNbMGYkZFZ2a94l/Z48yMr/wlGM9/7P8A/tlQf8M3/wDU1f8AlO/+20AeRYFaFpPLHbKqOVXJ4Fesf8M+f9TN/wCSH/2ypY/gH5aBf+Ekz/24f/bKAPJ2mkk4dywHTNIv3hXrg+A+P+Zj/wDJH/7ZTh8CMEH/AISP/wAkf/tlAHk+BX094T/5EvRP+wfB/wCi1rzz/hRn/Uw/+SX/ANsr0/SbH+y9FstP8zzfstvHB5m3bv2qFzjnGcdKALdZ3iIZ8L6oD0NnN/6Aa0ar6hafb9MurPf5f2iF4t+M7dykZx360AfPvkx/3BXP3dxLHeTIjkKrkAelez/8Kp/6jP8A5K//AGdZc/wQ864kl/4SDbvbOPsXT/yJQBw/hsme2uDN85DgDPbiugtLaGS5VXjDLg8Gun0r4Sf2ZFIn9t+b5jBs/ZMY4/3604Ph55Ewf+1N2AePs+P/AGagDlv7Ns8H/R0/WuO+zQ5P7sda9l/4Qn/qIf8AkH/7KsT/AIVP/wBRr/yV/wDs6APHr+ztzeMTEp4H8qsaPYWrzS7oFOFHr616dP8ABrz5i/8Ab23IHH2PP/s9S2Xwg+xu7f25v3DH/HpjH/j9AHntxYWsVtJJHAquqkqRng1kedJ/fNexTfCvzYXj/tnG4Yz9l6f+P1nf8KV/6j//AJJ//Z0Ad/4XOfCGjk9fsMH/AKLWtSqul2X9m6PZ2Pmeb9lgSHftxu2qBnHbpVqgDO8Q/wDIs6p/15y/+gGvCdx9a9/1G0+36XdWe/y/tELxb8Z27lIzjv1rg/8AhVP/AFGf/JX/AOzoA4qK8uFhRVlYADAFV7y4lkdDJIWIHGa9CHwuwoH9sdP+nX/7Oo5PhV5hB/tnGP8Ap1/+zoA81mdvLPzGq/mN616c/wAJdy4/trH/AG6f/Z1H/wAKf/6jn/kp/wDZ0AeRbj611/h9Q2ixFhk7m/nXS/8AClP+o/8A+SX/ANsrY074Z/YLFbf+1vM2knd9mx1PpuoA4q/GyNNvGTVFnYKcGvR7n4cfaFUf2rt2nP8Ax75/9mqufhbkY/tj/wAlf/s6APO/Ok/vmvdPD5z4Z0wnr9ji/wDQBXGf8Kp/6jP/AJK//Z13en2n2DTLWz3+Z9nhSLfjG7aoGcdulAFiqmrf8gW9/wCveT/0E1bqG7g+1WU9vu2ebGybsZxkYzQB5VuPrXJ39rA+o3DNGpYyEk+tes/8IJ/1Ef8AyB/9lWZN8LfOneT+2Mb2zj7L0/8AH6AOI0azt/Jl/dL94fyrUS2hRtyRgH1rq7L4b/ZEdf7V37jn/j2xj/x6rP8AwgX/AFEv/IH/ANlQBx5RcHjtXGnTrTJ/cL1969j/AOED/wCol/5A/wDsqyv+FUf9Rn/yV/8As6APMfssCfKkYA9K53xj+4s7Uw/ITIQcd+K9uPwmyf8AkNf+Sn/2dZet/A3+2YYY/wDhIfJ8ty2fsW7PGP8AnoKAPnnzpH+VnJU8EetJ5Mf9wV7eP2b8HP8AwlX/AJTv/ttP/wCGcv8Aqaf/ACnf/baAPU/BAx8P/DwHT+y7b/0UtblUdE03+x/D+n6Z5vnfYrWO38zbt37FC5xk4zjOMmr1ABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBV1N2j0i8eNirLA5VlOCDtPNec/wBraj/0ELr/AL/N/jXourf8gW9/695P/QTXmOygDFvvEGspfzKmrXyqHOALlxj9a4rxv4v8S2k9kLXxDqsAZH3CO9kXPI64atDWdWlg1u8iWJCElIBJPNcZ4uvGvZrQuqrsVgNvfkUAXfDnjXxTP4htY5vEusSIxbKvfykH5T23V3reJNc2n/ic6h0/5+n/AMa8w8F2y3XjLT4WYqHZskf7hr11vDsG0/v5OnoKAPW7OeVrC3ZpXLNChJLHk7RXHeMtU1C11tEtr65hQwKdsczKM5POAa6q2kKWcCgAhY1H6CvNfiPq8tp4nijSJGBtUOST6tQBi+LPEmuW2ih7fWtQifzlG5Lp1OOe4Nchb+MfE7XUIPiPViDIoIN9LzyP9qreuanJqOnCCSNUHmBsqTnjNYdrbKb2D5j/AK1P/QhQB7kdX1Lcf+Jhddf+ezf413vhqaSfw9bSTyPJI2/LOxJPznua4ptKj3H96/X0Fdv4eiEGg28akkLu5P8AvGgDSqnrDvFod9JGzI620jKynBBCnBBq5VHW/wDkAah/16yf+gmgDyv+29V/6Cd5/wCBD/41Uk17WBKwGq3wGf8An5f/ABo2e9cvqGtS2+ozwrDGwjcqCSeaAJfE/ijX7eW2EGualEGVs7LuQZ5HoaZ4Q8U+ILnxZYw3Ou6lNEzNuSS8kZT8p6gmsi/mOrtG0wEflAgbO+frV7wjZJD4rsZA7EqzcEf7JoA9dGpX24f6Zcf9/W/xrgJ/Eeti5lA1nUAA7AAXT8c/Wu1U/MPrXjd3r0y31wogj4lcdT/eNAGnq3ivxFHeBY9e1NBsBwt5IP61e8I+J9eudcMdzrepTJ5LHbJdyMM8diaw7a2XWojdTMYmU7NqcjA+v1rZ0DTY9P1MzxyM58srhgMc4oA7eXWdTEMhGo3YIQ4/ft6fWuAHirxDgf8AE+1P/wADJP8AGuqmuW8iT5R9xv5V5uLhsD5RQB9H/Du7uL3wFp1xezy3E7+bullcuzYlcDJPPQAV01cl8Lm3/DbS2PGfO/8ARz11tAFDXZHh8O6jJE7JIlrKyupwVIQ4IPY14x/wkOtf9Be//wDAl/8AGvZtfG7w3qY9bSUf+OGvEfsy/wB40AaSa9q5jXOq33T/AJ+H/wAas2+uasVbOp3h573D/wCNUYrRTEvzN0qte3Lae6JGocOMnd2oAs+Itf1mDQ5ZIdWvo3DLhkuXBHPrmuN/4S3xH/0MGqf+Bsn+NXfEGqyS6LKhiQAsvQn1rkftbZHyrQB1v/CVeIf+g9qf/gZJ/jWxp/iPXHslZ9Z1Bjk8m6c9/rWJ/ZceP9Y/5CrMP+ixCJfmA5yaAJfEHifXobeAw63qUZLkEpdyDPH1rM03xZ4jk1W1R9f1RlaUAqb2Qg/rS6sn2uGJXO3axPH0qrptgi6pakO3Eo7UAd7/AG9q/wD0Fb3/AMCH/wAa9e0WR5dB0+SV2d3to2ZmOSxKjJJrxjyR6mvZtDGPD2nD0tYv/QBQBerG8Wzy23he7lt5XikXZteNipHzqOorZrnvHkpg8E38igEjy+D/ANdFoA88/tzVv+gnef8AgQ/+NZjeIda3H/ib3/X/AJ+X/wAaojVJM/6tPzNcy/iW4EjD7PFwx7mgDU1rxV4hi1ALFrupouwHC3kgHf3rIvPGHiZYQV8RasDu7X0n/wAVWTqmtS3F4HaGMHYBgE1VinN8/lOoQAbsrQBqp4z8UGRc+JNX+8P+X+X/AOKrc/4SzxF/0H9U/wDAyT/GuWisEM0Y3tyw7e9dcdChyf30n5CgDrNE17V5dFt3l1W+dyDlmuXJPJ96s3Gt6qoXGp3g+lw/+NVNIsUh0mCNXYhQeT9TUGtSmySEoA+8kHd2oAsza9q4hcjVb4HH/Py/+NUf+Ei1v/oMX/8A4FP/AI1lT6rILd/3SdPU1nf2vL/zyT8zQB9I6DI83hzTZZnaSR7SJmdjksSgySe5q/WX4YcyeEdHcjBaxhOP+2YrUoAo63I8Xh/UJInZHS1kZWU4KkIcEGvHv7f1j/oLX3/gS/8AjXr+v/8AItan/wBekv8A6Aa8O30AXW8QazuP/E3vv/Al/wDGo5PEOtAjGr3/AP4Ev/jVbyw3OetPjs1mBLOwx6UAXdO8Qay96qvq18wweDcue31rY/tnU/8AoI3f/f8Ab/GueW3FkfPRi5XjDdOad/akn/PNPzNAEn/CQaz/ANBe+/8AAl/8au22u6s0ALapek5PJuH/AMa5r7Q390U4arJAPLWJCB3JNAGxq/iDWY4YjHq18hLHO25cZ4+tZTeJtd2n/idaj0/5+3/xqhqWqyTRxgxIMMTwTVKC5ae4jhZQA7BSR2oA1f8AhJ9f/wCg5qX/AIFyf41754dlkn8L6VLM7SSSWcLO7nJYlASSe5rwP+yY/wDnq/5CvfPDqeX4X0pAchbOEZ/4AKANKsjxbNLbeCtbnt5Himi0+d45I2KsjCNiCCOhB71r1keLUEvgrW4ycBtPuFJHvG1AHy7/AMJn4o/6GTV//A+X/wCKqlL438ViZwPE+sgZ/wCghL/8VV3+xIf+e0n5CqMuhQmZ/wB9J19BQBpaT4y8TyRSmTxHq7kMMbr6U44/3q2dO8V+InvkV9f1Rhg8G8kPb61haZo8UccgErnLDqB6Vs6Xpcf9oJ+8foew9KAN3/hJNc/6DWof+BT/AONM/wCEl13/AKDWo/8AgW/+NP8A7Lj/AOej/kKz/JHqaAN+z8Qay1qpbV74nJ5Ny/8AjVfVvEetxxRGPWNQQljnbdOO31qnBIYoQgAIB6mo7tftaqr/AC7TnigB1p4m15r2FW1vUSC4BBu5Of1rof7d1f8A6Cl7/wCBD/41zdhpyNqNuPMbmQdhXVf2RF/z1f8AIUAeraNI8ug2EkrM7vbRszMcliVGSTV2qejp5eh2CA5C20Yz/wABFXKAM3xHLJB4V1WWB2jkjspmR0OGUhCQQR0NfP8A/wAJT4g/6Dupf+Bkn+Ne+eLG2eC9bYdtPnP/AJDavmD7e/8AcX86AN1vFXiHcf8Aifan/wCBkn+NXtO8Ta88cm/W9RbDDGbuQ/1rCigEsSyEkFhkgdqvWUQiRwCTk96ANv8A4SPW/wDoM6h/4FP/AI0n/CR65/0GdQ/8Cn/xrKuJDFCXAyQRwap/b3/uL+dAFv8A4SnxB/0HdT/8DJP8aX/hKfEH/Qd1L/wMk/xrA+0t/dFTxuXjDEYoA6Kx8Ta88j79b1FuO93If61dPiPW8H/ic6h/4FP/AI1z+m8ySf7oq7MdkLsOdozQBf8A+Ek1z/oM6h/4FP8A417joErzeGtMlmdpJHtImd2OSxKDJJ7mvm/7c/8AcWvozww27wjo7HvYwn/yGKANSszxLLJB4U1aaCRo5Y7KZkdGwykISCCOhrTrL8UDd4Q1getjOP8AyG1AHz5/wlXiH/oO6n/4GSf41fh8Ta8YUJ1vUScf8/cn+NYf2Zf7xqynyxqo7DFAG7b+I9bKtnWdQPPe6f8AxqtrPibXYtLkeLWtRRgy4Zbtwev1rOW4aLgKDn1qnrF2z6XIpUD5l/nQBXHjDxLn/kYtW/8AA6T/AOKrpR4m13H/ACGtR/8AAt/8a8+8w+ldR5x9BQBsHxNr2f8AkN6j/wCBcn+NSQeJddLHOtageO90/wDjWOvzrk09X8rkDOfWgDYn8Sa4LeQjWdQBCnBF0/8AjWV/wlXiH/oO6n/4GSf41FNOWhcbRyKz6APpjw3LJP4U0maeRpJZLKFnd2yzEoCSSeprTrK8K/8AInaN/wBeEH/ota1aAKmrHGi3pPQW8n/oJry/z4/U/lXp2s/8gK//AOvaT/0E15PQB5p4h1G2TxJqCs5yJ2B+U1zerML54jbfMEBDZ4q54n/5GrUv+vhqoQ/xUAavgCxnbx5pgCjO9/4h/cavcTpt1j7g/wC+hXkXw8/5H/S/99//AEBq93oAuxXsCworMcqoB+X2ryj4o31ufFkXzH/j0T+E/wB5q9EPWvJvih/yNkX/AF6J/wChNQBgMwvR5Vv8z/eweOKda6bdfbbf5F/1qfxD+8Kh0f8A4/j/ALhrobb/AI/IP+uq/wAxQB7I1rLuPyjr610+joU0mFW6jd/6Eaxm+8frW5p3/IPj/H+ZoAtVQ11xH4d1J34VbSUn6bDV+szxL/yKerf9eU3/AKAaAPGv7Ws/+ejf98GuF1fU7U6zdkO3+tP8JrZri9U/5C11/wBdDQB0OlI2pLK1n84jIDZ4xmt/QrSax1u2ublQsUZJYg5xwR0rF8C/6i+/30/ka6qgDpV1iy3D943X+4a8TvJUN/ckHgzORx/tGvSB94fWvLrn/j8m/wCujfzNAHZ+E7G4vNHeS3UMomZclsc4Fbq2sunHz7tQsf3cg55NV/h1/wAizJ/18v8AyWtbxF/yCx/11X+tAFCXUrYwuA5yVI+6fSuFEbYHFdA33G+hrFoA+hPhYMfDXSgf+m3/AKOeuurk/hf/AMk30v8A7bf+jnrrKAKGvHHhzUiegtJf/QDXiXnx+v6V7X4g/wCRZ1T/AK85f/QDXhVAGol/brGqlzkDB+U1ka5qFuZ4cOfuH+E+tKetY+tf66L/AHT/ADoArarcR3GnPHCSXJBAIx3rBFrLkfKOvrWm/wB2oh1H1oA7AQSYHHb1qlc3EcFwY5SQwAyAM1sDoPpXN6x/yFJP91f5UAPmmS4AERJIOTkYp1ipTULdj0EgJqna/eb6Vetv+PuL/eFAHT/aI/U/lXs2hnPh7TiOhtYv/QBXhte4aB/yLemf9ekX/oAoA0K5b4kzx23w91KWYkIvlZIGf+WqCuprjPi5/wAks1f/ALY/+j0oA8PGuWGf9a3/AHwa5p5kMjEHgsT0qOoqAJHsLi8bzbdQyfdyWA5q1pmi3xujiNfuH+MVb0n/AI8j/vmtvSf+Pw/7hoAoRaJfrMhMa4DAn5x611ZifJ4/WmD7w+tW6ALdpqNtbWqQzOQ69QFJ71keJtXszHbfvG+838B9BTbj/XtXP+Jf9Vbf7zfyFABJqVrJGyI7FmGB8pqpvWs6L/Wr9auUAfUPhTnwZov/AGD4P/Ra1rVkeE/+RL0T/sHwf+i1rXoAzvETBfC+qMegs5if++DXg32yH+8fyr3fxN/yKer/APXjN/6LNfO9AG5H88asvQjIqzAwRTu9arWv/HpF/uipRQAX1xHHZszkgZHb3rK/tC2/vn/vk1Z1b/kGv9V/nXPUAaX2iP1P5VVmu4VlILH8qbVG6/4+D9BQBJeXcLIuGPX0pNOmSTVLZFOS0gA4qjc/dX61Lo//ACHLL/rstAHdeRJ6frXtmgjHhzTQeotIv/QBXj1exaJ/yL+n/wDXrF/6AKAL1ZfidS3hHV1XqbGYD/v2a1KzvEX/ACK+qf8AXnN/6AaAPnH7Dcf3R/31VV9NujIxCL1/vCt+oz940AZlpZzQqwkUDJ45rR06NkvlZhgYP8qU1La/8fA+hoA094rG3itWsagCZZF209WDdKrjpUsP3j9KALlh8uo25PQSCuq+0R+p/KuVtP8Aj8h/3xW/QB6xpRzo1kR0NvH/AOgirdU9H/5Adh/17R/+girlAGR4uGfBOuAf9A64/wDRbV8teU/p+tfU3iz/AJEvW/8AsHz/APotq+YKANq0sp2soSFGCg/iqwkTwAiUYJ5GDmrVh/yDbf8A65imXn31+lAFK+dRaMT6j+dZfmp6/pV/UP8Ajyb6j+dY9ACbDV61tZXtwyqMZPeqtbGnf8eK/U/zoAWyieB3MgwCMDnNTXUqrZzMTwEOeKcarX//ACDrj/rmaAMj7bB/eP8A3zX054UYN4M0Vl6HT4CP+/a18n19W+D/APkR9C/7B1v/AOi1oA2azPEoz4T1cDqbGb/0A1p1m+I/+RW1X/rym/8AQDQB87+RJ6frRjbweoq1VV/9Y31oAjkIBFUtRUy2LKnJyP51bl+8PpUE/wDqT9RQBh/Y5v7o/Oui8tvT9azq2KAEjBCAGklYKBmnioLn7q/WgBC4dSq8luBUf2Sb+6Pzoi/1yfWr9AH0D4XBXwho4PUWEAP/AH7WtWszw3/yKmk/9eUP/oArToAzvEP/ACLOqf8AXnL/AOgGvCsn1P517l4mYp4S1dl6rYzEf9+zXzr/AGlceq/980AeceJSf+Ep1Lk/8fDd61vB3MN5nn5l6/Q1z/iCd38R37NjJmJPFdR8PIUurfUDLk7XTGDjsaAO+8BAf8J1pvA+8/b/AGGr20AbhwOvpXkXgyzhi8YWDoG3Bmxk/wCya9cU/MPrQB5lck/a5uT/AKxu/ua8/wDGxJ15Mn/lgv8AM11F3qVwL64AK4Erj7v+0a5DxLK1zqivLjd5QHAx3NAE3gnnxCc8/uH/AKV6FAo+0RcD769veuL+HFpFc+K2jlDFfszng47ivVY9GsxKhAfIYH7/AL0AdieprRtP+PVPx/nWeRzWja/8eyfj/OgCWsbxh/yI2u/9g64/9FtWzWL4yOPAmvkdtNuP/RTUAfKeT6n86eOnNU/Pf2/KujsdNt57CCWQNudAThsUAbngMD7Pfcfxp/I1seJePDl3jjhen+8Kz/DsKWMdwLfIDspO457GjxdeTReE750K5CrjI/2hQBxm5v7zfnWsgGxeB0HauJbWLsKfmTp/cr1i10Wzks4HZX3NErH5+5AoA0vCI/4kz4H/AC2b+Qqv4748OLj/AJ+E/kauaeg0+3MNtwhYt83PNY/je5kbw8ASP9enb2NAHExk+anJ+8O/vXXkDPQflXFQSMbiIHGC6g8e9epHSLTceH/77oA9M8Af8iNp/wD20/8ARjV0dYfg2FIPCVlHHnau/GTn/lo1blAGX4m/5FLV/wDrxm/9FmvnbPvX0T4m/wCRS1f/AK8Zv/RZr51oAeOlV7n7y/SrA6VHIgcjdQBDB/rhVrA9B+VJaQI1yoIOMHvWj9ki9G/OgCSuM8Rk/wBuS8/wr/Kul+1y+o/KuY1smXVpGfqVXp9KALfhXm6uc8/ux/Oukcfu2+lYXg+FJLy63Z4jHf3rpb6FIdPnkTO5IyRk0AZmfevoXw1/yKmk/wDXlD/6AK+Zf7QuPVf++a+l/CrF/BujM3VrCAn/AL9rQBrVxnxc/wCSWav/ANsf/R8ddnXKfE6FLj4c6pFJna3lZwcf8tkoA+XD0ruI1XyU+UfdHb2rGOj2mD8r/wDfdehxeH7DyI/lk+4P4/agCno6r9hPyr989qtXAAjGABz6VMLSKyHlQBgv3uTnms/W7iS1sFkhIDeYByM9jQA2b/j3k/3D/KuKDHA+Y/nWtNrF39nk+ZPuH+D2riBrN5gfMn/fFAF67Zvtb/Me3f2qJST1JP1NRrM86iWTG5uuBitTRbKG9eYThiEAIwcUARad/wAhO3/66CuswPQflVSz0WzS+hZVfIcY+eug/s+D0b/vqgD2nw5/yK2lf9eUP/oArSqhoKhPDmmqvRbSID/vgVfoAzPEv/Ip6t/15Tf+gGvnqvoXxL/yKer/APXlN/6Aa+ec0AbNt/x6x/7oqO5+8v0pkMziBAMfd9KZNKzMM+npQBW1D/jyb6j+dY9aeoufsLfUfzrH8xqALFQS/wCsNSbjUEjHzDQBVv8A/Vp9aNH/AOQ3Zf8AXZadcjeq7uxp2mRqmrWrLnIlBFAHoFe06F/yLum/9ekX/oArw3z39vyr3HQDnw1phPe0i/8AQBQBoVm+JP8AkVdW/wCvKb/0A1pVl+JyV8I6wR1FjOf/ACGaAPAKnT7g+lZX2qX1H5Vr24D20bN1KgmgAFR3H+pP1FW0iU5zn86gv0EdmzL1yOv1oAoZPqfzqrT/ADX9vyqDeaANK2/49x9TV20++30pdJtIp9NSSQNuJbocd6vLZwxcoG59TQBHH/rV+tXagESqcjOR707zDQB7Pon/ACL+n/8AXrF/6AKvVR0Pnw9p3/XrF/6AKvUAZ3iH/kWNU/685v8A0A14Ngeg/Kve9eG7w3qQPQ2ko/8AHDXiX2WP0P50AOhH7lPpWTrn+vh/3D/OpJb6aGZ40K7UOBlaydWvZpJoixXhT296AK93/wAezfUVn1YaZ5V2vjB9BTPLX/JoAuVu6X/yD0+p/nVX7DB6N/31U8TG3jEcX3R0zzQBV8RcW8GOPnP8q56UnyX5PT1rS8UXcqWtvtK/6w9vasG1uZLi7ihlIKSOFbAxxQAyvrDwd/yIug/9g23/APRS183f2Paf3X/77r6V8LII/B+jIv3VsIAM+nlrQBq1n6//AMi1qf8A16S/+gGtCs/X/wDkWtT/AOvSX/0A0AeH1h3X/H3L/vGtvNc/dyMLybp989qALVp9xvrU0gGw8UuixLcQymXJKsAMHHart1aRR27MoOcjvQBl4HoPyqrV7YKj+zx+/wCdABD/AKoUk/3R9aeFCDC9KbIMgZoAiT/WL9as1UkPlxM69VGRVP8AtK49V/75oA+mPDf/ACKuk/8AXlD/AOgCtKsrwsxfwdozN1awgJ/79rWrQBkeLXEXgrW3bkLp9wTj2javlz+2oP8AnnJ+lfT/AI0OPAXiDP8A0DLn/wBFNXyH5if31/OgDE1ZTcaxdzJwrykgHrXc/C6wkmtdT2soxJH1+hrirlHa6kKqxBbggda9F+E0bi01XKMP3kfb2NAHf+G7N7PxFaTyMrKhbIXr9016Cuoxbh8j9fauL04bNQiZ/lAJyTx2roFmi3D94nX+8KAPH73WIBqFz+7k/wBc/p/eNZF//wATC4E0PyqFC4brUd9In9o3Xzr/AK5+/wDtGpbUF4SUG4buo5oA6j4W6dK/jFgHT/j0k9fVa9gGlTKwJePg5715l8KY3/4TRvkb/j0k7e617GyNtPyt09KAIPtSf3WrVsnD2aMOhz/Oue3r/eH51vaac6fFjnr/ADNAFqsXxnz4D1//ALBtx/6Katqsbxl/yIuvf9g24/8ARTUAfI+w13uj6XNLoto6ugDRAjOa4bafQ/lXp2gceHbD/riKAKxmXRvluQZDLyvl9sfWsrxNq0N74bu7eKORWdVwWxj7wNXvE7qsttuZV+Vupx3FczqDLJYSpGwdiBhVOSeaAOSa0fYfmXpXv1jo85021PmR8wJ6/wB0V4i1tPsb9zJ0/uGvoWwONMtAevkR/wDoIoA5vUrldJuhbzguxUPlOmD9fpXPeI7tNT0oW8CsjearZfpgZrW8ZSxrraBnUHyF4J9zXPOfPXZD+8brtTk4/CgDFt9Km+1Q/PH/AKxfX1FexHTJdx+dOvvXm8FrcC6izBL/AKxf4D6162T8x+tAHW+GYjD4ctY2IJG/kf75rVrP0H/kCQf8C/8AQjWhQBl+J+PCOsf9eM3/AKLNfOe8V9GeKP8AkUdY/wCvGf8A9FmvnDB9KAJ15UGnCIvyCOKRFOwcHp6VPCrFThT19KAH2Fq7XigFeh/lWr9hk/vLVXTkb7cnynoe3tWyVODwenpQBxvmj0NZN/ZSXN40qMoBAGD9K0ccn600o5OQrEewoAn8K2r2t1cs7Kd0YAx9a3NTcDSbo/8ATI1m6KCk0u8bcqMbuO9XdUdTpF3hl/1Td6AOM89fQ19SeEjnwToZ9dPt/wD0WtfKea+q/CH/ACI+hf8AYOt//Ra0AbFc38QYWuPAuoRIQC3l4J/66rXSVg+NjjwffZ/6Z/8AoxaAPDTo0+P9ZH+tdjHcqsSKQeFA/Ssbcv8AeH51bFzBgfv4un98UARalrUFrd+W8chO0HjFYHiHxBbPpqgRS/60dh6H3pdenibUgVlQjyx0Ye9c7rLCSxURkOfMBwpz2NAEL6zA8bKI5MspA6d6whZSAfeWpxFIWH7tuv8AdNXPslz/AM+8v/fBoAmsdCuJ7GORZYgGBwDn1roPD+hXEUk+6WI5VemfenaTBKulQBonBweCp9TW5pIMTS+YNmQMbuM0ANTTZbdxM7oVQ5IGc1P9qT+61WbmWMWsmZF+7/eFZHnw/wDPVP8AvoUAe8aEd3h3TSO9pEf/ABwVfrO8PEHwzpZByDZxYI/3BWjQBmeJf+RT1b/rym/9ANfPO019D+JAT4V1YAZJspsD/gBr5+8mX/nk/wD3yaALUKHyU+lMmG1h9KniVhCgKkHHcVDdHDLnjjvQBn6k2LFz7j+dYvmj0NbGqMP7PfkdR396wcj1oAu7xUErjzDUmD6VDIrGQ4U/lQAmwz8LxjnmrFjbNHfwOSpCuDxTLVW3N8p6elXLcEXMeR/EKAN3zh6GvefDxz4X0s/9OcP/AKAK+f8AI9RXv/hz/kVtK/68of8A0AUAaVZXik48H6yf+nCf/wBFtWrWT4q/5E3Wv+vCf/0W1AHzX5o9DXR2aFrGEjugrmdrf3T+VdTYMBp9uCQD5Y70ASAbOtVtRO6xYe4/nVl2XI+YfnVW9O60YLycjgUAZGw0fY3/ALy1Jsb+635Va8t/7jflQBv6Bpkr6NEwdMbm659avS6bLGAS6HPpmpvDikaHECCPmbt71cuwdq8d6AMaW1eOF3LKQoycVR89fQ1sXfFlNn+4a5/cvqPzoA900E58OaafW0i/9AFX6z/D/wDyLOmf9ecX/oArQoAz/EDiPwzqbnkLZyk4/wBw14X/AGrD/ck/SvcfExA8JauScAWM2Sf+uZr518+H/nrH/wB9CgCC71mAXkw8uT759KqTXC3zBogVCjB3VRu/mvJivILnBHerOnxSPG+1Gb5uwzQBLBavLMEUqCfWrX9lTf34/wBafZQyLdKWjcDB5KmtPa3ofyoAftNUrm9jgnMbKxIA5FXPNj/vr/30KxtRBe+Yp8wwORz2oArax/xM4Ykh+QxsWO/6VT0zRZ31a1USR5MoHer8UMrk7I3bHopNX9Kt5l1i0ZoZFUSqSShAFAGz/wAI3df89ofzP+Fe6eH4jD4Z0yJiCUs4lJHsgry/cPUfnXqmkf8AIDsf+veP/wBBFAFys7xCdvhjVCe1nMf/ABw1o1m+JP8AkVdW/wCvKb/0A0AeE/ak9GrFuUL3UrDoWJq/uHqPzqlK6+a3zL19aANbQIytvP0++P5VevVP2VvqKp6E6eRN8y/fHf2q9eMptmAYE5HQ0AZWw1P9gk/vLTK0sH0oAzGspA2Ny1DPbsigkg5NakgO88Gqt2DsXjvQBk3g8uymc8hUJOK57+0Yv7j10epAnS7ng/6s9q43Y/8Acb8qAPrbwi2/wRobDo2nW5/8hrWxWL4N48CaDn/oG2//AKKWtqgDB8df8k78R/8AYKuv/RTV8X19nePiR8NvEpHBGk3WP+/LV8Q/aJf75oA6KD/j3T6V6P8AC7/j11P/AK6R/wAjXJ6PZW02i2kksKs7RAsx7mvR/hzZW0dvqGyFRl0z+RoA6BvummKPmH1qxrSrb6PcSwDZIoGGHbkVyS6lebh/pD9fagDzO9/5CFz/ANdn/wDQjXQ+G/8AkFt/11P8hXKXUrm8nJY5MrfzNd94Dtobjw/I88YdvtDDJ9MCgDtvhb/yOLf9er/zWvX5P9U/+6f5V5t8P7SCHxMzRRKrfZ3GR9RXpVxxbSkddh/lQBxg6Cup0b/kEw/8C/8AQjXnAvrraP3zV6B4ZkaTw7avI25jvyT/AL5oA1ax/F//ACI+u/8AYOuP/RbVsVk+LBnwXrYPQ6fP/wCi2oA+U69F0T/kA2X/AFyFcR5Mf9wV1mnSummW6oxCiMAD0oAyPHP+vsf9x/5iud0//j/i+p/lWt40mkaazy5PyP8AzFZvhsCfxFaRzfOjFsqe/wApoA2GJ2n6V6rbf8ecH/XJf5CuS/syy/59k/Wro1C6RQqzsFUYA44FAHNfEL/kZI/+vZf5tVPwhxrhx/zxb+lR+L7iWbWkaVyzeQoyfqau/DuNJ/FLJModfsznB+ooA7BCfMX/AHhXSHrUTWFqqkiBQQMisr7Zcf8APZqAPTdA/wCQHb/8C/8AQjWjWR4VdpPDNozncx35J/32rXoAzPE3/Ipav/14zf8Aos187V9G68ofw3qSsMhrSUEevyGvEv7PtP8AngtAGQn+rX6VctPuN9asm1hU4EYAFOSJEB2qBQBLZf8AH2v0P8q1D0P0rKT9225OD61IbiXB+c9KAOSPU/Wrlt/qB9TWQZZMn5j1ra01Q9ijOMnJ5/GgB9V9Q/5Btx/1zNTXp8pEMfy5POKoyyNJEyOxZWGCD3oA5ivq3wf/AMiPoX/YOt//AEWtfNn2O3/55LX0v4VAXwdoyqMAWEAA/wC2a0Aatc948/5Em/8A+2f/AKMWuhrl/iQ7R/D7UmQ7WHlYI/66pQB5HWIwG9uO5pv225/57NVA3E24/vD1oAj1Ef6V/wABFQw/f/CraqJhulG5umTVzT7SCS5IeJSNp60AUIj++T/eH866ok5PNV00+0DqRAvUetbH2eL+4KAHWp/0VP8APeo7z7qfU1WmmkimZI3KqOgHas/Ury4VY9srDk0AWL0f6BN/uGudxVia9uXhdWmYgjkVQ8xvWgD6f8K/8ibo3/XhB/6LWtWsnwnz4M0X/sHwf+i1rWoAo63/AMi/qP8A16y/+gGvHM17Lq4DaJfA8g28gP8A3ya8t+zQ/wDPMUAYb/6xvrWXqv8ArY/90/zq5eyOl9OqMQquQB6VlX8jtIm5ieKAM/Uv+PF/qP51i1s3h3WrBuRkVm+WvpQBfoq35Sf3RR5Sf3RQBBD94/Spk++v1pkqhACgxmmo7bxz3oAvV9C+Gv8AkU9J/wCvKH/0AV85+Y39419F+GOfCOkZ/wCfGH/0WKANSsvxP/yKOsf9eM//AKLNalZniUZ8J6sD/wA+U3/oBoA+ca1IP+PeP/dFVPLT+6KPNdflViAOAKALj9RSDrVF55cj5zVjTnaa+RJTuUg5B+lAFirtS/Zof+eYqfyY/wC4KANzRP8AkEx/7zfzqe8+4n1qnp7GOyVUO0ZPA+tR6ncSpFHtkI+Y/wAqAGah/wAg24/65muSrXvbqc2E+ZW+4a5nz5f75oA+jPDn/IraV/15Q/8AoArSrL8MknwlpBPU2MP/AKLFalAGP4w/5EfXf+wdcf8Aotq+UsD0r6u8WjPgrWwen9n3H/otq+XfKT+6KAI0+4v0rofDn/HvP/vj+VPtNOtHsoWa3UsUBJ55rRs7aG3RxDGEBOTjvQBLmimXZMdszIcHI5rP+0zf89DQBnVLH9ym4Fbem2dvLYI8kSsxJ5P1oAj0Q/v5v9wfzraQnev1pNPs7eORykSjK84qfUEWHTbiWIbXSMlWHY0APr13Rf8AkA6f/wBe0f8A6CK+cf7X1D/n7k/Svojwy7SeE9IdzuZrGEknufLFAGnWZ4m/5FPV/wDrxm/9FmtOsvxPx4R1j/rxn/8ARZoA+eKyLj/j5k/3jWh5jetYlzNILuX5j940AdFoP/HvN/vj+VajfdrA0CaT7PN85++P5VrpI7NgsSKAJa1qya0dx9aAFb71Vb37ifWpyxz1qrek7E570AUL3/jwn/3DXMV00/zW7q3IK4IrN+yw/wDPMUAfSHhL/kSdD/7B9v8A+i1rXrK8LAL4P0YDgCwgA/79rWrQBn6/pf8AbnhrU9J87yPt9pLbebt3eXvQruxkZxnOMivDv+GW/wDqcP8Aymf/AG2voGigDyKx+BP2LT4Lb/hIt/lIF3fYcZ/DzK6Pw98Nv7BjuF/tX7R5zKc/Ztu3AP8AtH1ruqKAOV1DwV9usJbb+0PL8wAbvJzjnPTdWGPhNg/8hr/yV/8As69GooA8Sk/Z08yZ3/4SjG5i2P7P6ZP/AF1rovD3wg/sHTWtP7c8/dKZN/2Tb1A4xvPpXpdFAHN6D4R/sTUjd/bfPzGU2eVt645zk+ldFInmROmcblIz6U6igDkR4EwP+Qj/AOQP/sq6PSrD+zNMitPM83y8/PtxnJJ6fjVuigAqpqtj/aejXth5nlfareSHzNu7buUrnHfGat0UAeT/APCj/wDqYf8AyS/+2VpwfCfyLeOL+2t2xcZ+y4z/AOP16LRQB5RrPwR/td4W/wCEg8nygR/x5bs5/wC2gqDSvgP/AGZqkN5/wkfm+USdn2HGcjHXzPevXqKAOF/4Vt/1Ff8AyW/+ypv/AArL/qLf+S3/ANnXeUUAeV6r8FP7TvBP/b/lYQLt+xbv/alWfDXwg/4R7Vje/wBufaMxNHs+ybOuOc7z6V6XRQBzx8K5Uj7Z1GP9V/8AXrO/4V//ANRP/wAl/wD7KuyooAp6Rp/9l6XDZ+b5vl7vn27c5Ynpk+tXKKKAIL62+26fcWu/Z58TR7sZ25BGcfjXGf8ACtv+or/5Lf8A2Vd1RQBwZ+GWTn+1v/Jb/wCzoHwyx/zFv/Jb/wCzrvKKAOD/AOFZ/wDUW/8AJb/7Oj/hWf8A1Fv/ACW/+zrvKKAPKP8AhSH/AFMH/kl/9sq/a/CP7NbrF/be7BPP2TH/ALPXpFFAHm9x8I/PVR/be3Bz/wAemf8A2eq5+DOR/wAh7/yT/wDs69QooA8s/wCFLf8AUf8A/JP/AOzr0nS7L+zdHs7HzPN+ywJDv243bVAzjt0q1RQAVleJtE/4SLw7c6X9o+zfaNn73Zv27XDdMjPTHWtWigDyv/hSv/Uf/wDJL/7ZUJ+BmT/yMX/kj/8AbK9aooA8oj+COxcf8JBnn/ny/wDtlWbX4N/ZpS/9u7uMY+x4/wDZ69OooA88HwpwQf7Z7/8APr/9nVn/AIVr/wBRb/yW/wDsq7qigDzyX4VeZKX/ALZxnt9l/wDs6q3Xwd+0hR/bu3af+fPP/s9em0UAeUt8Etykf8JB1/6cv/tlRf8ACjP+pi/8kf8A7ZXrdFAFTSbH+y9FstP8zzfslvHB5m3bv2qFzjnGcdKt0UUARXcH2qynt923zY2TdjOMjGa5j/hBv+oh/wCQP/sq6yigDz24+Ffn3Mkv9s7d7FsfZc4/8fqrP8HvOYH+3NuB/wA+n/2demUUAeVy/BTzYyn9v4z3+xf/AGyq/wDwor/qYv8AyR/+2V65RQB5h/wpv/qO/wDkn/8AZ0f8Kb/6jv8A5J//AGden0UAeXSfBjeB/wAT7GP+nP8A+zpg+CuCD/b/AP5Jf/bK9UooA8v/AOFM/wDUe/8AJP8A+zr0bS7L+zdIs7HzPM+zQJDv243bVAzjt0q1RQAVW1Kz/tDSbuy3+X9pgeLfjO3cpGcd+tWaKAPNP+FQf9Rz/wAlP/s6afg7k/8AId/8k/8A7OvTaKAPMG+DW7/mO/8Akn/9nUtp8Ifstysv9ubsAjH2TH/s9elUUAcL/wAK1/6i3/kt/wDZU/8A4Vz/ANRT/wAl/wD7Ku3ooA5GHwL5MQT+0c47+R/9lUd34A+1Iq/2lt2nP+oz/wCzV2VFAHATfC/zoHj/ALXxvXGfs3T/AMfrN/4Ux/1Hv/JP/wCzr1GigCrpdl/ZukWdj5nmfZYEh37cbtqgZx26VaoooAqatY/2pot7p/meV9rt5IPM27tm5SuccZxnpXl//Ci/+pi/8kf/ALZXrdFAHm8Hwk8m3jj/ALb3bFAz9k6/+P1Mnws2A/8AE4zn/p1/+zr0KigDzyf4U+dCU/tnbk9fsv8A9nVT/hTn/Ud/8k//ALOvTqKAPLf+FL/9R7/yT/8As60bT4WfZbZYv7Y3YJOfsuP/AGevQaKAOIg+HXksT/am7I/59/8A7Kluvh19ps5YP7U2+YhXd9nzj/x6u2ooA8r/AOFKf9R//wAkv/tlelaXZf2bo9nY+Z5v2WBId+3G7aoGcdulWqKACquqWX9paPeWPmeV9qgeHftzt3KRnHfrVqigDy3/AIUv/wBR7/yT/wDs6oy/AXzJnf8A4STG45x9h6f+RK9gooA8q0/4KfYY3X+3/M3HOfsWMf8AkSrq/CPa2f7b/wDJT/7OvSKKAPOv+FT/APUa/wDJX/7OrH/Csf8AqL/+S3/2dd7RQBwJ+GH/AFF//Jb/AOzqKf4VecoH9s7cH/n1/wDs69DooA81b4Q7kK/25jI/59P/ALOoP+FMf9R7/wAk/wD7OvUaKAKul2X9m6RZ2PmeZ9lgSHftxu2qBnHbpVqiigAoqhr1zLZeHNSurZ9k0FpLJG2AdrBCQcHjqK8T/wCFleLP+gr/AOS0X/xNAHvdFeJQ/EHxO0KM2p5JHP8Ao8X/AMTU0fj3xK2c6l/5Aj/+JoA9norxe48feJUgZl1LBHT9xH/8TVL/AIWN4q/6Cn/kvF/8TQB7rRXhv/CxPFP/AEFP/JeL/wCJrQsfHfiOa3LSajuO4jPkR/8AxNAHsVFeP3njrxHFBuj1HB3Af6iP/wCJqh/wsLxRj/kJ/wDkvF/8TQB7fRXhX/CxvFX/AEFP/JeL/wCJr1jwVqV1q3g+yvdQl864l8ze+0LnEjAcAAdAKAN2iioL6R4dOuZYztdImZTjoQDigCeiuE/4SPVf+fr/AMhp/hWFdeNfEEd3KiX+FVyAPJj4/wDHaAPWKK8cm8d+JEYbdRxx/wA8I/8A4mmJ498SludS/wDIEf8A8TQB7NRXjv8AwnfiP/oI/wDkCP8A+JrP/wCFieKf+gp/5Lxf/E0Ae5UV4zb+PfEkkAZ9Sycn/lhH/wDE1OnjnxETzqP/AJAj/wDiaAPX6K8euPHXiOO1kdNRwyqSD5Ef/wATWP8A8LI8V/8AQV/8lov/AImgD3miqGhXMt74d026uX3zT2kUkjYA3MUBJwOOpq/QAUVneIbqax8L6pd2r+XPb2c0sb4B2sqEg4PB5FeDf8LT8Y/9Bj/yVh/+IoA+iqK8Ws/H/iaWyhkk1LLMgJPkR8n/AL5rSsfGmvzRuZL/ACQeP3Mf/wATQB6vRXj/AIh8deIrHRJbi11Hy5VZQG8iM9T7rXHf8LX8af8AQZ/8lYf/AIigD6Ror5p/4W142/6DX/kpD/8AEV13h/x94lvtFinutS3yszAt5EY6H2WgD2iivFNf+IHieyt4WtdT2FnIJ+zxHIx7rXM6n8V/GlvpV1NDrO2SOIsp+ywnB/74oA+kaK+OP+F7/Ef/AKGP/wAkbf8A+N19XeD7+51XwNoWoX8nm3V3p1vPNJtC73aNWY4GAMkngcUAbNFFYnjDULrSvCd5eWEvlXEezY+0NjLqDwQR0JoA26K8T/4WD4n/AOgn/wCS8X/xNZbfEzxcGP8AxNu//PtF/wDEUAfQFFfN198V/GkNxtj1nau0HH2WH/4inad8VvGk90Ul1ncu0nH2WEf+yUAfR9FeCJ8SfFhkUHVeCQP+PaL/AOJrb/4TnxF/0Ef/ACBH/wDE0AewUV5GvjfxCVGdQ/8AIMf/AMTQ3jfxCOmof+QI/wD4mgD1yivID458RBT/AMTH/wAgR/8AxNM/4TvxH/0Ef/IEf/xNAHsVFU9HnkutDsbidt8sttG7tgDLFQSeKuUAFFVdUmkt9IvJoW2yRwO6NjOCFJBrzn/hMNd/5/v/ACCn/wATQB6hRXAweJdWe3Rmu8krkny0/wAKZceJ9XRlC3eMj/nkn+FAHoNFeVax4z1610uSa3v9kgZQD5MZ7+61zf8AwsjxX/0Ff/JaL/4mgD3mivEP+Fh+KP8AoJ/+S8X/AMTVS4+JPixJiq6rgYH/AC7Rf/E0Ae9UV4LD8SfFjsd2q54/59ov/iatW/xD8USXUaPqmVZgCPs8X/xNAHuFFeT/APCa+IP+f/8A8gx//E16bpU8lzo1lPO26SW3jd2xjJKgk8UAW6KKoa9cy2XhzUrq2fZNBaSyRtgHawQkHB46igC/RXgv/CyfFn/QV/8AJaL/AOJq3H8Q/FDRqTqfJH/PvF/8TQB7fRXia/EDxOeup/8AkvF/8TUN78RPFMNozx6phgRz9ni9f92gD3Kivnn/AIWh4w/6C/8A5LQ//EU3/haPjH/oMf8AkrD/APEUAfRFFeE2fxH8VS2qvJquWJPP2eL/AOJq5b+P/EzswbUs4H/PCL/4mgD2qivGpPHniRYmI1LkDj9xH/8AE1T/AOFieKf+gp/5Lxf/ABNAHuNFUdEuJbzw/p1zcNvmmtYpJGwBligJOBx1NXqACiqGvXM1l4b1K6tn2TQWkskbYB2sqEg4PHUV4j/wsvxb/wBBb/yWi/8AiaAPfaK8Uh+IHiZ4EZtTySuT/o8X/wATSS/EHxOpG3U8cf8APvF/8TQB7ZRXicHxB8TvMA2p5H/XvF/8TVr/AITvxH/0Ef8AyBH/APE0AexUV4d/wsTxT/0FP/JeL/4muW1z4ueN7PVpIbbW9kaqpA+yQHqPdKAPpqivmbSPi543uppVn1vcFUEf6JAO/slbNv8AE3xdJdRo+rZVmAI+zRf/ABFAH0BRXi//AAn/AIm/6CX/AJAj/wDia9b0a4lu9BsLi4bfLNbRyO2AMsVBJwPegC7RRVTVp5LbRb2eBtssVvI6NjOCFJB5oAt0V5J/wm3iH/oIf+QY/wD4msq4+IfihLiRV1TCqxAH2eL/AOJoA9worweT4keK1Ixqv/kvF/8AE1LZ/EXxTLdKkmqZUg8fZ4v/AImgD3OivHf+E68R/wDQR/8AIEf/AMTTP+E88Sf9BL/yBH/8TQB7LRXh1x8Q/FCTFV1TAwP+XeL/AOJq3pPj3xLczSrPqW4KoI/cRjv7LQB7NRXlU3jPX0gdlv8ABC5H7mP/AOJrN/4T3xL/ANBL/wAgR/8AxNAHs9FUtGuJbvQbC4uG3yzW0bu2AMsVBJwPertAGV4pOPB2sn0sJ/8A0W1fNX2j/Z/WvpXxUCfBusgck2E+P+/bV8z/AGeX/nm1AG9aR77OJs4yucVaiixnmq9kQljCrcEIMirKTRr95wKAIr8eXYyP1wBx+NYn2n/Y/WtjUpo206UK4JIHH41z+aALn2of3D+dbujHzrFmHH7wj+Vc0BxXR6AyrpzBjg+Yf5CgCzfQ7rbGf4hWd9nP979K1Ltg8OEOTkdKp7G/umgCl9hP/PQflXt3w+j8rwJp6Zzjzef+2rV47mvZfAf/ACJNh/20/wDRjUAdDVTVm2aLfNjO23kOP+AmrdUtaONA1Anp9lk/9BNAHmH9oj/nkf8AvqsC7nD3kzbcZcnrV7zY/wC+KzJxm4kI5BY4oAguJMsvHaovN2c4zS3DBGXcccVXeVNn3hQBP9sH9w/nWb9pH939am81P7wqjkUAbFpcD7Mvy9z3qY3oi5KE596oWkqLbgFgDk06aRGUbWB5oAnudRDWsq+URlSOtY32j/Z/WrUpzC4HXFUNjf3TQB9L+Fjnwfox9bCD/wBFrWrWV4V48HaN/wBeEH/ota1aAMrxSnmeD9ZTON1hOM/9s2r5s/slv+ew/wC+a+lvEYLeFtVCjJNlMAP+AGvAfslx/wA8WoA0LHTiNPgHmjhB2p018NIYRtGZfMG7IOMdqu2gKWcSsMEIAR6Vg+J7qCC6txNKqExkgHvzQBB4k15bjQpYxbsuWXnf71xX20f3D+da2p3UFxp7xwSrI5IIUdetYf2eX/nm1AGp9hP/AD0H5V2vhtPJ0KJCc4Zufxrm/ss//PJq6TRpEg0uOOZgjhmyD9aAM7xteizsrRihfdKw4OMcVw99qgu7Ce3ERQyoU3Fs4zXU/EO4hbT7HEin983/AKDXCxsJpFjiO93OFUdzQBlf2O3/AD2X/vmvtjwGnl/Djw2mc7dJtRn1/crXyN/ZN/8A8+kn5V9e+C0aPwD4fRxtZdMtgQex8paANuuc8fLu8D6gOn+r/wDRi10dc948/wCRJv8A/tn/AOjFoA8V8j/a/SsBh87fU10gIzXNu6+Y3P8AEaAMvUIt91nOPlFO0uLZdk5z8hqS6RpJsopYYHIqTToJftR+Q/dNAGjH/rE/3h/OuhMnPSsJIZPMX5D1FbOaAJ1mwo+X9abJcYx8v61HvUcEiobieJAu+RRnpmgCV7oCNjsPA9arfbx/zzP51FNeW4gcmZcYrP8A7QtP+fhPzoA+kvDjb/C2lN0zZQn/AMcFaVZfhdg/hDR2U5VrGAgjuPLWtSgCjrZx4f1E+lrL/wCgGvHPP/2f1r2LXiB4c1IngC0lz/3wa8T+0Q/89FoA3IdSCQIvlE4XH3qHuxOQQhXHHWshb+1VQDOgIHNWLe6gkVjHKrAHnFAEPiCT/iSy8fxL/OuP8z2rqvEM8Q0SXLj7y/zrjvtEP/PRaANry/eqN1Fm4PPYVb+2W/8Az2WqlxcRNMSsikYFADYl8snnOatWjf6ZD/viqiyoejA1PaSKLyIlhjeKAOk3V7RoX/Iu6b/16xf+gCvEfPi/vivbtBIPhvTSOQbSL/0AUAX6zfEi7/CurLnG6ymGf+AGtKs/XwT4a1MDkm0lx/3waAPnr+zT/wA9R/3zVyPTyIl/eDp6VY+zzf8APNqtx283lr+7bpQBSj04kH96PyqDUdMb7C/70dR/D71tRW02D+7aor+0uGs2CxMTkcfjQByH9ln/AJ6j/vmj+yG/57D/AL5rZ/s+7/593/KnfYLv/n3f8qAIrDSWFmv74dT/AA+9XYtPMTEmQHI9KtWdtMlqqvGwOTwamaJx1U0AUpLQtEw3jkelU/7OP/PUf981rmJ2GApJPQU37Jcf88WoA9k8PLs8L6Wuc7bOEZ/4AK0aoaECvh3TgwwRaxAj/gAq/QBleKP+RP1j/rwn/wDRbV83Yr6R8Uf8ihrH/XhP/wCi2r5vyKANa3/49o/90VJ9nM/IbbjjpUdv/wAe0f8AuirUDqqnccc0AQ/ZzbfvS27HGAMUfax/cP51JeTRi1bLjqKzftEX/PRaAKP9rL/zxP8A31XP6tb/AG/UnuFbywwA2kZ6CtT7Fc/88WqCSyufMP7h/wAqAItC00rPN+9H3B/D71uwWRjuI33g7WzjFVNJhkgllMyFAVAGe/Naquu4c0AWvM9q988Oc+FtK/684f8A0AV8/eYn94V9A+GznwrpOP8Anyh/9AFAGlVHXBu8P6iPW1lH/jhq9VLWjjQNQJ6C1k/9BNAHjX2U/wB8flXI6heiHUriMxk7JCM5612nnR/3xXn2ryIdavPmH+uagC5bn7arMPk2nHPOav6faH7avzjoe3tWfow8yGUp82GHT6VtWCst4pYYGD/KgC99kP8AfH5Vzv8Abi/8+7f99V1RYYPPavODdQZP71etAG4bgXX70LtzxgnNbPhuLzrmcA4wg/nWBYKZrNXiG9STgj610vhdGjurjepXMY6/WgDS1C3MGm3EpbdsjLYx1rkv7VX/AJ4n/vquy1p1XQr5mOAIWJNea/bLf/nstAH094afzPCekvjG6yhOP+ACtOsnwowbwborKcg2EBB/7ZrWtQBmeJv+RT1f/rxm/wDRZr53r6J8R/8AIq6r/wBeU3/oBrwDaPQflQA6L/Ur9KbL1FUJnYTOAzAA8AGmb3PVm/OgCzd/8er/AE/rWXVvcTwSSPQmk2j0H5UANHQVuaP/AMeLf75/pWHWpphItTgn75oA1j0pp6GqsjNt+8fzqPe394/nQBJXs3gL/kSLD/tp/wCjGrxTJ9a9q8Af8iNp/wD20/8ARrUAdHVDXf8AkXdS/wCvSX/0A1frP8Qf8izqf/XnL/6AaAPFqhb7xqLc3qfzqJmbceT+dAEOo/6yP/dNUZPuGn6kzeZHyfunv71UQktySaAHVDVnFVaALMX+rFPqoCQOCavab80km75vlHWgCNvumoa2JUXym+VenpVLaPQflQB9DeF/+RQ0f/rxg/8ARa1qVmeGv+RT0j/rxh/9AFadAFDXf+Rd1H/r1l/9ANeMZr2vVxnRb4HkfZ5P/QTXlvlR/wBxf++RQBnJ9wfSuJ8ff8hCy/64t/6FXTXjst7MFZgA5wAelcH47kf7fZ/O3+qbv/tUAZ1v/rh9Ktg8is/w6S+uRK53LtbhuR0rs/Ji/wCeSf8AfIoAnHQVKn3aubF/ur+Vc/q0jpqTqjsq4XgHHagDJ8ff8eFl/wBdm/8AQa5TSP8AkNWf/XZa3PEbtJbwCRiwDnG457VS8OoreJ9NBUEG5TII96AOxyPWvpHwv/yJ+j/9eEH/AKLWvH/s0H/PCP8A74FezaEAvh3TgowBaxAAdvkFAF+ud8e/8iPf/wDbP/0YtdFXMfEckfD/AFIg4P7rp/11SgDx0da5d/8AWN/vH+dafmP/AH2/OsVmO9uT1NAFhelXNO/4+j/umk01Va1yygnceorY0qNDeHKL9w9qAIweR9atVpeVH/zzX/vkU3Yv91fyoAyn+8aoan92P6mp9QJW/lCkgZHAPtXP6/LIscG12HzHoaAJLof6JL/u1jYqrczS/ZZP3r/d/vGsjzpf+er/APfRoA+0fB3/ACIug/8AYNt//RS1s1heBiT8PPDpPJOlW2T/ANslrdoAzfEX/Ir6r/15zf8AoBrwSvefE5x4R1jH/PjP/wCizXzj5j/32/OgC24/eN9a0tJH7qX/AHh/KuMuJpRcyYlf7x/iNX9Knl8qT96/3h/EfSgDf8SD/iRS/wC8v864ytTW5pTpMgMjn5l/iPrXL+Y/99vzoA6Kmt1rL8x/77fnV61Ja3BJycnrQBag+830q1b/APHxH/vCobMAu2R2q9CB5ycDrQBdr3zw7/yK+lf9ecP/AKAK8Fr3vw7/AMivpX/XnD/6AKANGqOt/wDIA1D/AK9ZP/QTV6qGvf8AIt6l/wBekv8A6AaAPIatR/6tfpWNvb+8fzqVZH2j52/OgDbh+6frRP8A6k/UVkRyPg/O350/zHPV2P40AWaWq24+p/On5PrQBZXpTJvuj61nzyOJiA7AexqIyOert+dAGlF/rV+tXqwrd2+0x/M33h3rYyfWgD1XSf8AkC2X/XvH/wCgirdU9I/5Adj/ANe8f/oIq5QBleKf+RP1n/rwn/8ARbV82V9LeJOfCurZ/wCfKb/0A18++Wn9xfyoAltv+PWL/dFSGnRgCNcDtVLUWZZI9pI+U9DQAt//AMebfUfzrJq3GzO4DMWHoTmpdi/3V/KgCWopPvmtbYv91fyrKv8Ai8YDgYHT6UARGgdajyfWjNAE9fRPhn/kUtI/68Yf/RYr5wyfWvo7wx/yKOj/APXjB/6LFAGpVDXv+Rc1L/r0l/8AQDV+szxMSPCerkcH7DN/6LNAHi+K4TVf+Qxd/wDXVq2vOl/56P8A99GsucBriQsMksck96ANDw3/AMe1x/vj+Vb1v/rh9DWVoCgW82APvjt7Vo3JKwErwcjkUAXyPlP0NeSn7x+prvjLJg/vH6f3jXAHqfrQB2nhz/kBxf7zfzrqNC5nm/3B/OqHguKNvCtuWRSd8nJX/arQ1L9zHGYf3ZLHJTjP5UAWPEP/ACLWo/8AXu38q8hrutXnlOi3gMrkGFsgsa89yfU0AfXXg7/kRdB/7Btv/wCilrZrF8Gf8iHoH/YNtv8A0UtbVAGb4j/5FXVf+vKb/wBANfP+419AeJP+RV1b/rym/wDQDXz5uFAFOYZmf61DIxTGO9SysPOb61XnYZWgB0chaQA1NiqsLDzVq1mgCwLOMgHLfnVmAfZ49icjOeaRT8o+lKOaAHmUsMHFN3GjFG00ALmva/h//wAiLp//AG0/9GtXiuw17X8PxjwLp/8A20/9GtQB0dZ3iI48L6of+nOb/wBANaNZniRgvhTVmPQWUxP/AHwaAPB/NPtVOS8kWVgAvB9KX7dD/tflVWRg8jMOhORQA6VzckF+CowMUkcK7+pp0MTSKSuOD3p7oYF8x/uj0oAPKX3rF+0v6LWt9si/2vyrDzQBoQfvIQzdeelXLRzC7FecjHNULaVVtwDnOTVmKdMnr09KAL7XLspBC4NRZqITKTjn8qduFAH0V4Z/5FPSP+vGH/0AVp1meGf+RS0j/rxh/wDRYrToArakofSrtT0aFwf++TXAf2dF/ef869Av/wDkG3P/AFxf+RriNwoA8z1e6eDWryJApVJmUE1xvio/bLq2aXgrGQNv1rovEGoQp4k1FW35W4YHA96wb63fVZEe1xiMbTvOOaAKvhWyjk8RQqS2Nj9/9mu+/suH+9J+YrmfCmjXSeIoWYx42P8Axf7Nd8dNnwfudP71AHP/AGl/Ra5nWbuQarJwv3V7e1aZ1W3yfv8AX+7XPaveRSak7LuwVXqPagCG4jGoqqTZUIcjZVrQNIgTxHp7B5Mi4U9R603Srd9RlkS3xlFBO4471vaVpNzbaxaTyGPZHKrNhsnFAHe/Y4/Vvzr1jRxt0KwUdBbRj/x0V5N9ti/2vyr1nR2DaFYMOhtoyP8AvkUAXK5b4lHb8PNTI/6Zf+jUrqa5b4lDd8PNTA/6Zf8Ao1KAPA/Nb0FZ5jBY8nrWh5Le351D9kk/2fzoA1tEsY5dPLMzA+YRwfpW1p9hFHckqzZ2kcmq3h2xmbSyRt/1jd/pWzBayQSbn24xjg0AONumDyelVtg96vH7p+lUs0AcxqshTVJlHQEfyFc14hnYR2/A+838hXS6tGW1WcjuR/IVzmvWskkcG3bwx6n6UAc/JKXiZTjBGKqeQvqa0TYTEY+X86b/AGZP/sf99UAfXXgcY+Hvh0eml23/AKKWt2sTwWpTwD4fVuq6ZbA/9+lrboAyvFH/ACKGsf8AXhP/AOi2r5vzX0l4mUv4T1dR1axmA/79mvnf+zp/9j86AOVu7l1vZlAXAc1d0m7fyZeF+8P5VnahGU1K4VuqyEHFXNIUmGX/AHh/KgC1qczS6e6MAASOn1rD8se9btzbvNAUTGSR1NUv7JufWP8A76oAZ5Q9TWtYWiPZqSWzk9D71S+yyf7P51t6baSGxT7vU9/egBba0jVmwW6etW4rdBMvLdadDayKxzt6etWI7d/MXp19aAJPIX1Ne6eHxjwzpg9LOL/0AV4n5Le3517boIx4b00f9OkX/oAoAv1meJXMfhPVnXqtlMRn/cNadZPitgngzWmPQafOT/37agD59/tm4/uR/kaafEF0pwI4uPY/41kf2hD/ALf5VRl1q1SVlIkyDg/LQB0o8R3Y6Rw/kf8AGpI/Ed2zgGOH8j/jXKjWrU9BJ/3zUsGsWzTAASdP7tAHVf2/df8APOH8j/jVr+2bj+5H+Rrlf7Ut/R/++a0ft8P+3+VAGlLqs7SElY/yNCahKxOVT8qzhOkg3LnB9RUkTjJ+lAGnb30ouI+F+8O1av8AaMv91Pyrn4HH2hP94Vp7xQB7lobF/D2nMerWsRP/AHwKvVn6Bz4b0z/r0i/9AFaFAGd4iGfC+qD1s5v/AEA14L5C+pr3rxD/AMizqn/XnL/6Aa8KxQAwfKMDtVDUjmSP/dNW3nRXKnOQfSqN9IJJEK54HegCO1UPcKp6YNX/ALMnq1UrEZu1+h/lWpsNAEmay74ZvGPsP5VqYrKvmC3jA+g/lQBCqA9c04xgKTzTrZDOzBOwzzU0tu8cLu2MKMnBoAp19HeGP+RR0f8A68YP/RYr5t85ff8AKvpHwuc+D9HP/ThB/wCi1oA1ayvFBx4P1k+lhP8A+i2rVrK8U8+D9Z/68J//AEW1AHzb57egp4tElAdiwLcnFReWavRIfJT6UAPsj9jR1i5DHJ3VJc3khgOQvUdqqzXMdqwWXdlhkYGaYt1HeN5MW7e3I3DA4oAX7U/otYf9lQf3pPzFbv2KX/Z/On/2DeesX/ff/wBagDp/B9lHH4YgUM2N79T/ALVL4m/0W2t2j5LOQd30qfw8PsOixW8/31ZidvI5NUvFt1GbS2xu/wBYe3tQBzeoXLyabcIwXDRkHFch5K+prp5nFxA8Mf3pF2jPTNZ39hXnrF/31/8AWoA+nvBox4F0Ef8AUNt//RS1s1keEozF4L0SNsbk0+BTj1Ea1r0AZniX/kU9W/68pv8A0A189ZFfQnif/kUdX/68Zv8A0Wa+dKAIpQfNbjvVecH5eK0V+6KrXn3k+hoAqw/61atZHqKrUGgDaX7o+lPUEjgVEn3F+gq9af6k/WgCBVYnhSfwp2xv7rflWja/678DVpj8jfQ0AYte0eAP+RH0/wD7af8Aoxq8UHSva/h//wAiNp//AG0/9GtQB0dZXin/AJE/Wf8Arwn/APRbVq1k+LP+RL1v/sHz/wDotqAPm7I9R+dSqCVGBWZW1bf8esX+6KAJLThGzxz3pL4j7G3I6jv70j9RVW9/49W+ooAq5HqKo1LUVAFiL/VipovvH6VBF/qxU0fU0ATr94fWp8iqo60+gD6T8Mf8ijo//XjD/wCixWpWV4W/5E/Rv+vCD/0WtatAFfUONLus/wDPF/8A0E1we9P76/nXcav/AMgO+/695P8A0E15XigDzHxKQfFWp4P/AC8v/OjSo3eKUojMNwztGe1V9e/5GLUP+vhv511HgE4sL3/rsv8A6DQA/wAORyJrkReN1G1uSpHauzJG08joe9VQTmg/dP0NAHk5Zdx+YdT3rKvubxiORgdPpSH7x+ppRQBteDlJvLrAJ/djt7118KkTISCBnqRXP+BP+P68/wCuS/8AoVdjcf8AHtJ/umgBN6/3h+dez6F/yLunf9esX/oArwOvevDv/Ir6V/15w/8AoAoA0a5j4j/8k/1L/tl/6NSunrm/iF/yImof9sv/AEatAHguD6H8qdtb+6fyq1VsdB9KANXw2p/sk8H/AFrdvpWnKMLzxzTNA/5Bh/66N/SrWof8ew/3hQBSYjaee1Ucj1H51Yb7jfSsygDI1Mj+0pue4/lWJqwykWOeT0rU1H/kIS/UfyqhP0WgDICn0P5UuKvSf6tvpVagD6k8If8AIkaH/wBg63/9FrWxWR4R/wCRJ0P/ALB1v/6LWtegDO8Q8+GdUx/z5y/+gGvCtj/3G/KvedZ/5AV//wBe0n/oJrybNAHkOqq39sXfyn/Wt2q3o4Pky8H7w7e1WNa/5D19/wBd2/nUmmf6uT/eH8qAJlBLcA/lT9jf3W/KrVp/x8r9DWhmgDnNp9D+Vbem8WCZ45P86q1bt/8AUj6mgC4hGTzUqEeYvI61UXrUkf8ArF+tAGjkV7PoX/Iu6d/16xf+gCvEq9t0H/kW9N/69Iv/AEAUAX6x/F//ACI+u/8AYOuP/RbVsVkeLP8AkS9b/wCwfP8A+i2oA+U8H0P5VjXP/H1L/vGunrnLz/j+m/3zQBCg4NWLUH7QOOxpkH3T9at2n/Hwv0NAE+D6GtWqVadAE1uD5I47mrEIO48Hp6UWv/HuPqau2n32+lAEcKnz04P3vStLB9DTI/8AWL9auUAe1eH/APkWdM/684v/AEAVoVQ0H/kXNN/69Iv/AEAVfoAz/EH/ACLOqf8AXnL/AOgGvCsj1Fe5+Iv+RX1X/rzm/wDQDXgdAEEx/fP9aqzjLLjnippP9Y31oToaAG2AP2xeD0Pb2rWxVS0/4+F+hq/QBHkeo/OsfUT/AKc30H8qu1mXv/H030FAFrTCBLJkgfKOp96t3bL9jm+ZfuHvWPD94/SnT/8AHvJ/umgCtkeo/Ovpjwr/AMibo3/XhB/6LWvlyvqHwl/yJWif9g+D/wBFrQBr1l+KP+RQ1j/rxn/9FtWpWZ4l/wCRT1b/AK8pv/QDQB83YPofyq5GwESgkA49aKoy/wCtb60AR6sQZosEfdPf3pmk/NqSBeTg8D6VV1D/AFif7tXfCn/Ixw/7j/8AoNAG75b/ANxv++TWt5b/ANxv++TVzNa+aAMaBlSEB2CnPRjg1i+KnVrW22sp/eHofarGvc6xJ/ur/Kue1b/VRf7x/lQBWt+biMDk7hwK1fLf+43/AHyaytK/5DFp/wBdVrvM0Aet+G+PCuk54/0KH/0AVpVR0T/kAaf/ANesf/oIq9QBl+J/+RR1j/rxm/8ARZr5yzX0vqll/aWkXlj5nl/aYHh37c7dykZx3615z/wpn/qPf+Sf/wBnQB5U0rhiA3FMdjJjec4r1Q/BXLE/2/8A+SX/ANso/wCFKf8AUf8A/JL/AO2UAeVBRnpTti+lepj4KYP/ACH/APyS/wDtlL/wpb/qP/8Akn/9nQBwCAbF+gq/ZKpgOR/FXdj4R4UD+2+g/wCfT/7Op4Phb5Me3+2M85z9l/8As6AOFP7vlOD600zSYPzHpXft8Mdwx/a//kt/9nTf+FXf9Rj/AMlf/s6APNto9K9n8AjHgewx/wBNP/RjVzv/AAqn/qM/+Sv/ANnXZ6DpP9h6Hb6d53n+Tu/ebNucsW6ZPrQBo1l+JwG8I6wDyDYzA/8Afs1qVW1Oz/tHSbuy3+X9pgeHfjO3cpGcd+tAHzR9kg/55iomleNiiNhV4A9K9Y/4U7/1Hf8AyT/+zqBvgruYt/b+Mn/ny/8AtlAHm9oTKrGT5iDxRexr9kbjuK9Ot/g35CsP7d3ZOf8Ajzx/7PSz/B3zoSn9ubcnr9j/APs6APHdi+lZXmv/AHq9t/4Uj/1MH/kl/wDbKp/8KB/6mX/yQ/8AtlAHl1p81spbk5NWEABr1KH4G+TEE/4SHOO/2L/7ZUo+CWP+Zg/8kv8A7ZQB5WB8wqTFeoj4KYP/ACH/APyS/wDtlO/4Uv8A9R7/AMk//s6AO+8L/wDIoaP/ANeMH/ota1Kq6XZf2bo9nY+Z5v2WBId+3G7aoGcdulWqAM/xAxTwzqbIcMtnKQfQ7DXhn9p3n/PdvyFe9ajaf2hpd1Z7/L+0QvFvxnbuUjOO/WuB/wCFS/8AUa/8lP8A7OgDxy+hjmv55ZVDO7ksx7mu0+H1lbnT77MQ/wBcvc/3a6OT4K+ZKz/2/jcc4+x//Z1t+Hvhx/YNvPF/av2jznDZ+z7cYGP7xoAw9Ut4rfT3khQI4IwR9awDczbT856GvS73wZ9stGh+37NxB3eTnof96ss/DPIP/E27f8+3/wBlQB8xGV9x+bua29MtoZ7BJJUDMSck/WvUP+Gc+T/xVPf/AKB//wBtrSs/gV9ktVh/4SLfgk5+w46/9tKAOI8I2sMV3cmOMKTGM/nXQakBHpdy6cMsRIPpXWaV8Jf7Mlkf+2vN3qFx9kxjn/fq9dfDb7TZywf2rt8xCu77NnH/AI9QB4j9uuf+ex/IV9JeFmLeD9GZjkmwgJP/AGzWvPf+FIf9TB/5Jf8A2yvTNKsf7M0aysPM837Lbxw+Zt27tqhc47ZxQBbrmviF/wAiHqP/AGy/9GpXS1m+IdH/ALe0G403z/s/n7f3mzdtwwbpkenrQB8+5Nbi28WxfkHQV13/AAqH/qOf+Sn/ANnWgPhthQP7V6DH/Ht/9lQBy+m/urTbH8o3E4purTSLZgqxB3iuzg8A+THt/tLdznPkf/ZUy8+Hv2qER/2nsw2c/Z8/+zUAeayXUwjb94funtWANQusf65vyFeuN8LNykf2x1GP+PX/AOzrN/4Ut/1H/wDyT/8As6APFNT1K7GpTfv26jsPSqh1C6b70zH8BXst18APtNy8v/CS7d3b7BnH/kSov+Gev+pn/wDKf/8AbKAPHXvbjYf3p6egqv8AbLj/AJ6mvaj+zzkEf8JP/wCU/wD+2Uz/AIZ1/wCpo/8AKf8A/baAPUvBhLeA9ALck6bbEn/tktbVUtF07+x9A0/TPN877Fax2/mbdu/YoXOMnGcdM1doApaz/wAgG/8A+vaT/wBBNeSZr2K9t/tlhcW27Z50TR7sZxkYzj8a5H/hXn/UT/8AJf8A+yoA8C1n/kO3v/XZqWwJEb49a9Yvfgf9rvp7j/hIdnmuX2/Ys4z7+ZRB8D/JUj/hId2T/wA+X/2ygDzzTTvvkDcjB4/Ctryk/u12dr8HPs1wsv8Abu7AIx9jx/7PV/8A4Vf/ANRf/wAlv/s6APIauW/+oH1Nehf8Kb/6jv8A5J//AGdTR/CPy4wv9t5/7dP/ALOgDzl2K42nFM86QchjkV6U/wAI92P+J3j/ALdP/s6afhB/1HP/ACU/+zoA83+1z/8APQ/kK+gPDhLeFdKLck2UJP8A3wK4X/hT/wD1HP8AyU/+zr0PTbP+ztJtLLf5n2aBIt+MbtqgZx26UAWayvFAB8H6wD0NhPn/AL9tWrVXVLL+0tIvLHzPL+1QPDv2527lIzjv1oA+Y/s8X9wVzd5BF9um+QffNe8/8KY/6j3/AJJ//Z1mzfAHzp3k/wCElxubOPsHT/yJQB43a20JVsxg81bt7WETAiMdDXrcPwE8pSP+Ekzk/wDPh/8AbKmT4F7HDf8ACRZ/7cf/ALZQB5V5EX9wVJXq3/Ckv+pg/wDJL/7ZR/wpL/qYP/JL/wC2UAeeWSK1opI5ya0rCGMyPle1d5B8H/IhCf25uwTz9kx/7PVm3+FfkMx/tjdkY/49cf8As9AHECCMHIQZp20eld5/wrT/AKi3/kt/9lR/wrT/AKi3/kt/9lQB1mhf8i7p3/XrF/6AKv1BY232LTra137/ACIlj3Yxu2gDOPwqegDM8SnHhPVyOosZv/QDXzx50n9819IanZ/2jpN5Y+Z5f2mB4d+3O3cpGcd+tedf8Kb/AOo7/wCSf/2dAHlryOXOT3qzZjejb+ea9GPwXyc/29/5J/8A2dTQfB/yVI/tzdk/8+mP/Z6APOz+7G5OG9ab9pm/vmvSm+Ee5cf23/5Kf/Z0z/hT/wD1HP8AyU/+zoA8q+0S/wB81RuppDcHLHoK9c/4Uv8A9R7/AMk//s6gl+B3mSFv+Ehx7fYv/tlAHlMEr7j83apWdmUqxyD1r1GP4HbCf+Khzn/py/8AtlP/AOFJf9TB/wCSX/2ygDyfyk/u19MeFRjwbooH/PhB/wCi1rz/AP4Ul/1MH/kl/wDbK9L0qx/szR7Kw8zzfstukO/bjdtUDOO2cUAW6zfEYz4W1UH/AJ8pv/QDWlVbUbT7fpd1Z7/L+0QvFvxnbuUjOO/WgD558pP7tc3ezypfTqrkKHIAr23/AIVN/wBRr/yU/wDs6yp/gX59xJL/AMJFt3sWx9hzj/yJQB5bYxJdxu1yvmFTgE9q3/DVjbLr0JWEA7X7n0rubT4J/ZUZf+Eg37jn/jyx/wC1K0tN+FX9n3yXP9s+ZtBG37LjORjrvoAyvssH/PMVS+0S/wB813n/AAhf/T//AOQf/sqqf8K8/wCon/5L/wD2VAHjPiS+uU16ULKQNqdh6VnQzSXTFbhi4UZAPavWtT+DH9o6g9z/AG95e4AbfsecYGOu+oYPgh5LE/8ACQbsj/ny/wDtlAHnWlwR/wBr2nyD/WrXdeTH/drWtfg/9mu4p/7c3eW4bb9kxn/x+t3/AIQP/qJf+QP/ALKgDo9HGNDsQOgto/8A0EVcqGzg+y2MFvu3+TGqbsYzgYzipqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDO8QyyQeF9Ulhdo5I7OZkdDgqQhIIPY14N/wk2vf9BvUf/AuT/GvdvE//Io6x/14zf8Aos1857zQBal8VeIRMwGu6mBn/n8k/wAans/FGvsr7tc1I8jrdyf41z00h85+O9XNOO9ZM+ooA25/E2vCFiNb1EH2u5P8aqDxT4g3D/ie6l/4GSf41WuvltXPp/jWaJjuHAoA5yfx14uFxKB4p1oAOwAGoy8c/wC9TB478Xf9DVrf/gxl/wDiqw5/+PmX/fb+dPhhEiZJI5xQB1GjeN/Fct+Vl8T6y67CcNqEp/8AZq308X+JDIufEOq/eH/L7J/8VXGaNbqt+SGP3DW8kY8xee4oA7f/AISXXf8AoNaj/wCBT/417J4DuZ7zwTYT3c0k8z+ZuklcszYkYDJPPQV4MXOa9z+HRz4B07/tr/6NegDp65z4gXVxZeBdQns55LeZPL2yROVZcyqDgjnoa6OuW+JZx8PNTP8A1y/9GpQB41/wk+v/APQc1L/wLk/xrRHiPW9o/wCJzqHT/n6f/GuW8w+lbaxDYvPYUAPufE2vLNhdb1EDHa7k/wAahPijX/8AoOal/wCBcn+NUr4bLjA/uiq45NAGofFGv4/5Dmpf+Bcn+NRf8JT4g/6Dupf+Bkn+NUdtN8oetACXPi7xIty4XxBqoHoL2T/Gq03jDxMMY8RasP8At+k/+KqtdQj7U/J/yKqTxABeTQBq2vjDxM13EG8RasQW5BvpOf8Ax6tn/hKfEH/Qd1L/AMDJP8a4+2QLdRn0atjeaAPprw3LJP4V0maeRpJZLKFndzlmJQEkk9TWlWV4V/5E7Rv+vCD/ANFrWrQBieMNQutK8J3l5YS+VcR7Nj7Q2MuoPBBHQmvLv+Fg+J/+gn/5Lxf/ABNejfER9ngLUWIzjyv/AEaleHfax/cP50Aap+J3i/cf+Jv3/wCfaH/4ioJfil4xWTC6xgY/59Yf/iK5Jrwbj8h6+tOVPtA8wHb2waAO1034meLrid1m1bcAuR/o0Q7/AO5Wg3xC8UBTjU+3/PvF/wDE1xWkWxW4k+Yfc9PetVoDtPzDp6UAbX/CxvFX/QU/8l4v/iaoS/E/xgszqur4AOB/o0P/AMRWb9mP94flVGXTmaZ28xRk56UAdHB8TfFzq27Vs4P/AD7Rf/EVMPiT4s/6Cv8A5LRf/E1zUFgyKf3gPPpU6WDM+PMA/CgDf/4WT4s/6Cv/AJLRf/E171XzX/Zjf89V/KvpSgArm/iBqt7ongXUNQ0ubyLqHy/Lk2K2Myqp4YEdCa6SuP8AiscfDHVv+2P/AKOSgDyA/Fbxnj/kM/8AkrD/APEV1CePfEpjQnUuSoJ/cR+n+7Xkpbg120b/ALlOP4R/KgDo28feJQeNS/8AIEf/AMTSDx/4m/6CX/kCP/4mufI389Kinf7PHvI3c4wKAOlPj/xMFP8AxMu3/PCP/wCJql/wsfxV/wBBX/yXi/8Aia5/7crceWeeOtM8g/3h+VAHTp8RPFJUE6p/5Lxf/E1Fc/EfxXGF2arjJ/594v8A4mufHyjHXFVL+UIseRnJNAHQy/E3xcsLFdWwQOP9Gi/+Iqn/AMLV8Z/9Bn/yVh/+IrnJJg8bKFIyMZqt5R9aAPqfw7dzX/hfSru7fzJ7izhllfAG5mQEnA4HJ7VpVkeEhjwVog/6h8H/AKLWtegChrtzLZ+HdSurZ9k0FpLJG2AdrBCQcHjqK8W/4WR4r/6Cv/kvF/8AE17J4m/5FLV/+vGb/wBFmvnXbQB0LfEvxaGONW/8lov/AImlX4leLD11b/yWi/8Aia5N2xIw96chyDQB2Fv8R/FTzBW1XIwf+XeL/wCJq3/wsDxN/wBBP/yXi/8Aia4mKXypA5Gcdqn/ALQX/nmfzoA6f/hYvin/AKCn/kvF/wDE1m3nxP8AGEV0yR6vhQBx9mh/+IrLrNvLcyXTMGA4HagDrtK+Jfi25lkE2rbgqgj/AEaId/8AdrWh8feJWnRW1LILYP7iP/4muC0tPs8shJ3blA4+ta1vOPtMfy/xDvQB3H/Caa//AM//AP5Bj/8Aia9L0qeS50aynmbdJLbxu7YxklQSa8S88f3T+de06Ec+HdNPraRf+gCgC/Wf4guprHwzqd3avsngs5ZI3wDtZUJBweDyK0KyvFQz4O1kethP/wCi2oA8Q/4Wf4v/AOgv/wCS0P8A8RWlD8RPFLwIzapklcn/AEeL/wCJrhvIP94flV6KcJCiFSdoxnNAHZR/EDxMwOdT/wDJeL/4mpE8feJS2DqX/kCP/wCJrj0vAufkP51LDeBpANh/OgDsP+E78R/9BH/yBH/8TV7/AITLXv8An/8A/IMf/wATXFfaR/dP51ubPegBdQ+IPieC9aOLU9qgDA+zxHt/u1DH8RPFLE51T/yXi/8AiaydStDJfuwcDgdvaoYbFtx/eDp6UAdCvxB8TlwDqff/AJ94v/ian/4T3xL/ANBL/wAgR/8AxNc6tkwYHeOvpU32Y/3h+VAHuujXEt3oVhcXDb5ZraN3bAGWKgk4HvV2s/w+NvhrTB6WkX/oArQoAo65cy2fh7Ubm2bZNDayyRtgHawQkHB46ivGf+Fi+Kf+gp/5Lxf/ABNexeI13+FtVXpmymH/AI4a8C+wN/z0H5UAdAvxC8UFRnU//JeL/wCJqaLx/wCJmB3alnn/AJ4R/wDxNcqR5ZKHnbxmpInwDx3oA3NX+Ivim1015YNU2uGUA/Z4j391rnv+Fs+Nf+g1/wCSsP8A8RUGttv0mQdPmX+dcv5fvQB1n/C2vG3/AEGv/JSH/wCIq9bfFLxjJAGfWMnJ/wCXWH/4iuE8g/3h+Valjak2incOp7UAdU/xQ8YADGr/APktD/8AEUifFHxiZFB1jgn/AJ9Yf/iK5me3KKPmByfSoo48SLz3oA7T/hZfi3/oLf8AktF/8TXt2gXM174b0y6uX3zT2kUkjYA3MyAk4HHU180Yr6S8Lf8AIn6N/wBeEH/otaANWqGvXMtl4c1K6tn2TQWkskbYB2sEJBweOoq/WX4mG7wlq49bGb/0WaAPGP8AhZXiz/oK/wDktF/8TWTcfFfxolxIq6zhVYgD7LD/APEVS+zH+8PyrMn0h5Lh385RubONpoA2z8WfG3/Qa/8AJSH/AOIqzp/xU8Zz3qxy6zuUg5H2WEdv9yuVfSHU/wCuX/vk1NY2DW92shkDYB4AoA7z/hY3ir/oKf8AkvF/8TWH/wALX8af9Bn/AMlYf/iKp5rmqANDVvjX8QLbUnig1/agCkD7Fbnt7x0/SPjT4/uppVn1/cFUEf6HAO/slcHribtWkOf4V/lTtG/dTSk85UfzoA9Si+LfjZpkVtayCcH/AESH/wCIq/8A8LR8Y/8AQY/8lYf/AIivOIZwJ0+U/eHetL7UP7h/OgD6s8PXU194Y0u7un8ye4s4ZZHwBuZkBJwOBya0ayPCJ3eCdDPrp1uf/Ia1r0AZfif/AJFHWP8Arxn/APRZr5xxX0d4n/5FHWP+vGf/ANFmvnKgCjLC5mYgcE+tXdMhfbLx3Heom+8av6Z92T6igBl9Gy2MhYcADv71jBhkVv6n/wAg2b6D+dc8OtAHGTWNwbiQhRguT94etWbTTrkwnCD7394Vcf8A1jf7xq7Zf6g/71AFfTrSa3ut8qgLtI4Oa1VYb1+oqMU5P9Yv1FAHQ7TXunw548Aab/21/wDRr14aete5/Dr/AJEHTv8Atr/6NegDpq5X4mHHw61P/tl/6NSuqrlPid/yTnVP+2X/AKOSgD5/LDFdMkL+WvH8I71yx6V2Uf8Aqk/3R/KgDC1NSt3g/wB0VVXg1e1f/j+/4AKoigB2RTd60HpUVAFW5UtcMR0NQPayzY8tQcdeatSf6w1LbdWoAz47KeKRZHUBVOSd1WfOT1/Src//AB7v9KzKAPqPwoc+DdFI/wCgfB/6LWtasjwl/wAiVon/AGD4P/Ra1r0Acv8AEj/kn2pf9sv/AEaleDYr3n4j/wDJP9S/7Zf+jUrwigDniDuP1q/Zg/Zxx3NUz94/WtGy/wCPUf7xoA0dKU/aH4/g/rWmynaeD0qjpX/Hw/8Auf1rUP3T9KAKe1vQ1Xfhzn1q/WfN/rn/AN6gB8bAA5NTQuvmj5hVMU+P/WCgDS8xP7wr6Fr5vr6QoAK4/wCKylvhlqoUZP7ngf8AXZK7CuU+Jv8AyTrU/wDtl/6NSgD5rMEuP9W35V18cqCJMuPujv7ViVfH3R9KANKNlZcgg1DfgtbgKMnd2otf9T+NPl+5+NAGYI33D5D19KvYPpSDrUlAEJRieFNUNTRtsfynqa2F+7VHVPuxfU0AYu1h1U0VO/3DUNAH074T/wCRL0T/ALB8H/ota1qyfCf/ACJmi/8AYPg/9FrWtQBmeJv+RT1f/rxm/wDRZr532N/dNfRPiT/kVdW/68pv/QDXz9QBlyI3mt8p60ICoO4YqzJ/rG+tQydRQAh54HJpNjf3TTo/9YKmoAlwfSq00UjSkqjEewq5Th0oAp28bozb1K8dxVyAgXEef7wpsnQUkf8ArF+tAGt5if3hXuOgc+GtMx/z6Rf+gCvBK968O/8AIr6X/wBecP8A6AKANGsrxR/yJ+sf9eE//otq1ayvFP8AyJ+s/wDXhP8A+i2oA+bqcGAHUUymHrQBYBB6GprYFpwBycGqsXQ1csP+Pxfof5UAW/Lf+6fyrpNwx1rHrSoApXvN02PQUyH7x+lOuv8Aj4P0FNi+8fpQBJkDk8Cjzo/76/nTZf8AUv8ASqVAHvugnPhvTSOR9ki/9AFX6zvDv/Ir6V/15w/+gCtGgDP8Qf8AItan/wBekv8A6Aa8Nr3LxB/yLWp/9ekv/oBrw2gChKD5z8d6QMqffIH1qST/AFjfWqtz95fpQBDq8iHTHAYE7l7+9c5ketbGpf8AHg/1H86xKAJd6/3hWxp4LWSlRkZPT61z9dHo/wDyDE/3m/nQAl0jFVwp61XVG3jKnrWjcfdX61BQA3FfSHhf/kUNH/68IP8A0WtfONfR/hf/AJFDR/8Arxg/9FigDUrM8Sf8ipq3/XlN/wCgGtOs7xF/yK+q/wDXnN/6AaAPnvY3901C0UhY4RuvpV+loAypIJSwxG3T0pEhkVgWRgPcVqN1qOT/AFZoAp7T6VzVdUehrlD1NAHN6yrHVJCASNq/ypNNRhLJkEfKP51Z1P8A4/3+g/lTbH/WP9KALkQ/fJ9av5FUk/1i/WrVAH1h4P8A+RG0L/sHW/8A6LWtmsbwd/yIug/9g23/APRS1s0AZPiv/kTNa/7B8/8A6LavmOvpzxVz4N1r/rwn/wDRbV80eWKAL0H/AB7p9Ku2f3X+op1nZxNZQsQ2SvrT3jW3wIuN3XPNADL7/jyk+g/nWNWneSMbOTp0Hb3rJ3mgBMD0H5Vo2AH2c8D7x7U1bSIqCQeRnrWlYWcP2c8N9496AKV0B5PQdfSqigbhwOordnsoWjwQ3X1quNPgyOG/76oAfXtPgD/kRtP/AO2n/oxq8e8hPf8AOvY/AihfBVgB0/ef+jGoA6GuR+KX/JNdV/7Y/wDo5K66uP8AiuxX4Y6sR1/c/wDo5KAPnc9DXfRf6mP/AHB/KvNzO+D0/Ku8iuZPJj5H3R29qAM3XP8AkID/AK5j+tVLb/Wn6VfvkE9xvk67QOOKgWFI2yuc/WgAf/Vt9DWOK2ZP9W/+6a58Stjt+VAG1a/8eqf571fswNz8dhVXTo1fT4mbOSD/ADrV0+2jZpM56DvQBV1AD+zbjj+A1y1dprFukei3jrncsRI5rgftEnqPyoA+rPCX/IlaJ/2D4P8A0Wta9Y/hA58D6ET1OnW//ota2KAOW+JXHw91PH/TL/0aleB7j6mvfPiTz8PdS/7Zf+jUrwTbQBQKLk/KOvpVu2AEIwMcmojCM9TVqCMCLr3oAs2RKyttOPl7VcaR9p+Y9PWqdv8AI5I54qZ5DsPHagBvmyf32/OqMkj+a3zHr61N5p9BSGAOdxYjPNAFcyP/AH2/OmtNIFyJGB+tWTar/eP5VFPAEhLBiaAIftM//PZ/++q+q6+UMV9X0AFcx8RwD8P9SBGR+6/9GpXT1zPxEGfAOoj/AK5f+jUoA8H8tP7i/lUoAx0o8setOxQBPBxHx60sv3fxpsRwn41Iq+adpOO/FAEA61JUhtgATuPHtUO/2oAmX7oqrfqCseRnk1J55XjaKiuH80LkYxQBSdF2H5R0qDavoPyq3IuI2+lVaAPpXwr/AMido3/XhB/6LWtWsrwt/wAido3/AF4Qf+i1rVoAzvEPPhjVM/8APnN/6Aa8I2J/dH5V7t4iOPC+qn0s5v8A0A14H9oP90UAVJlAmfjvVeYYYfStI2okO8sQW5xiq1zaqrL8x6elAFe1ANwoIyMGr/lp/cH5VVgiEcwYEmrW6gCjvb+8fzp6u237x/Os/wC2N/cH51ftR51uHPBJPAoAng+Zm3c8d6lkULGxUAEDg0trACzfMelS3MQS1lYEnapOKAM/zZP77fnX0R4ZOfCekE9fsMP/AKAK+bftJ/uj86+kPC5z4Q0c+thB/wCi1oA1ay/E/wDyKOsf9eM//os1qVl+KP8AkUNY/wCvGf8A9FmgD5x2j0qjKzCZwCQM1d3VA9uHcsWIyc0AWdLUPFJvG7DDr9K07eNFnBCgHB7VS02IRxyAEnLCryt5bbhzigC5il8x/wC+351U+1t/dH50faW/uigC6vzDLcn1NNm+VRt457VCly237o/Omz3J2j5R1oAWRm8tvmPT1qnub1NS+cX+UgDdxR5A/vGgD3zw3/yKuk/9eUP/AKAK0qzfDgx4W0oelnD/AOgCtKgDM8SEjwpqxHB+xTf+gGvnzzpf+ejfnX0F4mOPCWrn/pxm/wDRZr5184+goA0oxujUtySOSaqX/EiY44q9Am63jOeqg1WvogZE5PSgDC1hiNMcgkHcv865zzH/AL7fnXTa3EF0mQ5J+Zf51y9AGhgV0mjgf2XHx/E386yPsS/3z+VbGn/ubJUHIBPJ+tAFmdRtHA61WkAETEDBxU0shIHHeoWO5Sp7jFAFPc3qfzr6W8K/8ido3/XhB/6LWvm/7MP7x/KvpHwuMeENHHpYwf8AotaANSs7xF/yK+q/9ec3/oBrRrO8Q8+GNU/685v/AEA0AeC1cijQxKSgJx6VW8v3rUgtVa3jO48qO1AFN40yPkX8qguUUW5woHI7Vpy2qgj5j+VVbu3Atm+Y9R2oAyMD0rnfLT+6PyrqPJH941k/2an/AD0b8qAOZvYYjdsTGpOB2otYIgzYjXp6Vr3Wko1wT5rdB2FJBpSIx/et09BQBS8qMdEX8qXavoPyrRfT0VGPmNwPSq/2Yf3j+VAH1B4Q/wCRI0P/ALB1v/6LWtisjwkMeCtEHpp8H/ota16AMrxQM+D9YHrYT/8Aotq+bvs7eor6T8Tf8ilq/wD14zf+izXzttb+6fyoA17KBvsMPI+4KS6gbK8jpViz4soc/wB0UlzyVxzxQBkX8ZSxkYkYAH86xd4roNTU/wBmzcHoO3vXOlGx90/lQBuop8tfoK1dNgZ7UkEffNZkZHlrz/CK29IBazbAz856fhQAk9swj6jrVfyG9RWjdArDlhgZ71U3L6j86AGbDXr/AIHGPBliP+un/oxq8kxXrngj/kTrH/tp/wCjGoA3q474rjPww1Yf9cf/AEcldjXIfFUE/DPVQBk/uen/AF2SgD5rMZweRXoEVm/kx/Mv3B/KuFMb4PyN+VekQxSfZ4/kb7i/wn0oAybm1cS/eXpVaWJok3MQRnHFat2jCflSPlHUVQvRiAZ4+YUAUnbMbD1BrG+xSf3lrXJyDioPJl/55v8A98mgDR022ZdNhBK9D/OtWxjKM+SDkCqlgpWxiDAg4PBHvWhagktgE0AV9c/5AN7/ANcTXnOK9I1tW/sG9+U/6o9q862P/db8qAPqvwf/AMiNoX/YOt//AEWtbNY/g/jwPoWf+gdb/wDota2KAOY+Iyl/h/qSryT5X/o1K8J+yy/3f1r3r4gf8iNqH/bP/wBGrXilAFP+xr88+SP++xUkemXca7XjAP8AvCujH3R9Khl/1n4UAYZtpYOZVwDwOc01uVIHpWhqH+pT/e/pWfQBX8tvT9aux2Nw0SsqDBGR8wqGtu2/49Iv90UAZElrNGQHXGfeq11C/wBnPHcd62b3/WJ9KoXX/HufqKAMfyZPT9a+q6+Xq+oaACuZ+IrBfAOolun7r/0aldNXLfEr/knup/8AbL/0alAHh/nx/wB79KPMX1/SqlSDpQBcicFOPWpo5FRsscDHpVWD/V/jT3+7QBbNzEVIDdvSquDUY61NQBC8iqxBPNRSTIMZP6UTf65qrT/w0ASSTIY2APOPSq24Uh6GmUAfTXhX/kTtG/68IP8A0WtatZPhX/kTdF/68IP/AEWta1AGZ4k48Kat/wBeU3/oBr598xfWvoLxN/yKer/9eM3/AKLNfO9AGxDazSQI6rlWXI5qve2kyumV7etbFj/yD7f/AK5iq+o/6yP/AHTQBjCF0+ZhgfWlyKsz/wCpNVKAOe3itvTUZ7BCoyMn+dYFdJo3/ILj/wB5v50AXLZGRm3DHFPvBmymA67DTk6mm3P/AB6y/wC6aAOe8l/T9a+k/Cwx4P0YH/nwg/8ARa18619F+GP+RR0j/rxh/wDRYoA1Ky/FH/Ioax/14z/+i2rUrL8T/wDIo6x/14z/APos0AfN+004RORkD9aWp1+6PpQA+0HlowfjJqZnXb1qJOhob7tADt6+tLvX1qGloAspKgXk/pTZZFYDaf0qCigCRGAcE9M1P58f979KqUUAfQ/h058L6UR0NnD/AOgCtGszw1/yKek/9eUP/oArToAyvFJA8H6yT0FhP/6Lavm37TF/e/SvpHxZ/wAiXrf/AGD5/wD0W1fMNAHWWh3WcJHQoMVDeg70+lS2H/INt/8ArmKZeffX6UAYeuqf7Hk/3l/nXKbD6V12u/8AIIk/3l/nXKjqPrQB04tJsD5f1FTxOsEYjlOGHUVaHQfSqN1/x8H6CgCwGE/EXJHJ7Uvkyen61Hp/+sf/AHavUAVvJf0/WvojwyMeE9IB/wCfGH/0WK8Ar6A8N/8AIq6T/wBeUP8A6AKANKs/XwW8NamB1NpKB/3wa0Ko63/yL+o/9esv/oBoA8N+yy/3f1rVgUrbxgjkKM1DVpP9Wv0oAr3DqjLuOOKqXUivbkKecip7/wD1ifSqUn+rNAFbaap+RJ/d/Wr1NoAzJbC4eQsqAj/eFRm0mh5lXAPTnNbS/dqtf/6tPqaAMuSNjGwA5xVT7PL/AHf1rRP3TUdAH0X4VBHg3RQeosIP/Ra1rVl+GP8AkUdH/wCvGD/0WK1KAM3xH/yK2q/9eU3/AKAa8Br3/wAQjPhnVAf+fOX/ANANeE+Wn90UATQ/6lPpTzVbey8KcAdBT43Zs7jmgCPUP+QfL9B/OsOt27+a1cHkf/XrL8pP7ooAcPuj6V0/h3/kGt/11P8AIVhiJNo+UdK3dGGyxYLwN5/pQBLq/wDx4j/fFYo+8PrWnrkjLpwIbH7wf1rn1mk3D5z1FAG5XrPgr/kT7L/tp/6MavI9x9a9c8Ef8ibY/wDbT/0Y1AG9XLfEr/knmp/9sv8A0aldTXNfENQ3gPUQwyP3XH/bVKAPn49DXpcJ/wBHi/3F/lXCG3iwfkFeiRRp5Efyj7g/lQBgat/x+j/cFYuq/wDHmP8AfFX/ABNK8OrhY2Kr5SnA/GsO4mkkjAdywz0NAFZP9Yv+8K3ieaw4h++T/eH866owx5+4KAKi/dFXdP8AvSfQVlXUjx3TojFVHQD6Ve0aRnebec4AoAsaz/yBLz/rka4CvQdUAbSboHkGM1xnkx/3BQB9G+FP+RN0X/sHwf8Aota1qy/C4x4Q0cDoLGD/ANFitSgDn/HX/Il33/bP/wBGLXj+PavZPGaCTwjeq3Q+X/6MWvKvscX+1+dAGqoG1eB0Haq84Hm9B09KcJnAHT8qhkcs+TQBla8MWkWP+en9KwhXQawoktow3Z+30rI8hPf86AIK2bb/AI9Yv90VneSnv+dW45WSNVGMAYHFAEeof6xP92qMn3DV24PmspbsO1RrAkjbWzj2NAFCvp2vnT7DD/tfnX0XQAVzPxE/5ELUf+2X/o1K6aue8eIJPBN+jdD5fT/rotAHhOPaojWt9hh/2vzqubOLP8X50AVovufjTbj/AFf406f9xJsj6YzzUEkjMuDjrQBGOtTVBmjzm9vyoAST/WGq1z0WpydxyaTyll+9nj0NAEFp/wAfkX+9W5geg/Ks+0tYxeRfe+961t/Z09/zoA918Of8irpX/XlD/wCgCtKs7w8MeGNLA6Czi/8AQBWjQBm+JP8AkVdW/wCvKb/0A18+Yr6E8QgN4Z1RT0NnKD/3wa8K+xxf7X50AdJpoH9l23A/1Y7Vm6/xcQ4/uH+dbmnwINNtwM/6sd6yPEUarcQYz9w/zoAwpPu1FVry1bg5o+zx+/50AVNq/wB1fyqaMYjGOK2f7Htf+mn/AH1VSe0ihmKJu2gDqaAIIfvH6VK33T9KrXLm2VTF1Y4OeaihvJZZkRtu1mwcCgCxgeg/KvdfD3/Is6X/ANecX/oArxLyU9/zr27QBjw3pgHa0i/9AFAGhWV4p/5E/Wf+vCf/ANFtWrWX4o/5FDWP+vGf/wBFtQB815q5H/q1+lVtoq7Gg8pfpQALU9rzcDPoaIYVYHOevrVq0t0NyvXoe9AEmB6D8qlwPQflU/2aP3/OmbBQBUkA8w8D8qpX/EaY9avT/LMQPSqd0odVDetAGeelNqyIUJ7/AJ077NH7/nQB9B+GP+RR0f8A68YP/RYrUrM8NDb4U0kDoLKEf+OCtOgDK8Vf8idrP/XhP/6LavmmvpbxTz4P1n/rwn/9FtXzb5YoA3rP/jxh/wBwVYUZ61JYWsbafbk7smMd6uRWUJBzu6+tAGBrwH9jycD7y9veuTAGRwOvpXceKLWOHw/M6bsh06n3rhQxyPrQB3YAwOB09K5vWf8AkKSY/ur/ACrshaR4H3unrXO6vZQnU3J3fdXv7UAU9E/103+6P51sHpVLTraOGRymeV5yav7QaAIq988O/wDIr6V/15w/+gCvCPLFe8eHuPDGl/8AXnD/AOgCgDRqjrf/ACL+of8AXrJ/6AavVR1v/kX9R/69Zf8A0A0AePVCxO4896lzWPcX86XMiLtwrED5aAJL8nzE5PSqM5Pknk9R3omu5ZWBfbwOwqvcTN5J6dR2oAZk+p/Ouhx7Vy3nPkdPyrq8cCgC1bgeSOB1PaqOtAeTDwPvH+VbVhbRyWas2c5PQ+9VdasovJi+9949/agDl6StB7OJY2I3ZA9aq+Uvv+dAHv3hr/kVNJ/68of/AEAVp1m+HBjwrpQ/6cof/QBWlQBX1C1+36ZdWm/y/tELxb8Z27gRnHfrXC/8Kr/6jP8A5K//AGdehUUAedn4UZP/ACGf/JX/AOzpU+FWzP8AxOc5/wCnX/7OvQ6KAPPJfhV5kZT+2cZ7/Zf/ALOq3/Cnv+o5/wCSn/2demUUAedD4T4A/wCJ1/5K/wD2dXbT4b/ZYTH/AGrv+bOfs+P/AGau4ooA4S/+Gn2228r+1tnzBs/Zs/8As1Z4+D+CD/bnQ/8APp/9nXpdFAHBf8Kx/wCov/5Lf/Z112h6X/Y2jQWHned5O795t25yxPTJ9av0UAFZviHSP7e0K403z/I87b+82btuGDdMj09a0qKAPNj8I8j/AJDf/kp/9nXQp4M2oq/b87QB/qf/ALKuoooA4DVfhf8A2neCf+1/K+QLt+zZ6f8AA6ov8Hdwx/buP+3P/wCzr02igDzBfg1tdW/t3OCD/wAef/2da3/Ct/8AqK/+S3/2VdzRQB51P8J/OmaT+2sbu32X/wCzqex+GH2NnP8Aa+/eAP8Aj2xj/wAfrvqKAOHufhx9ptZYf7V2+Yu3P2fOP/Hqx/8AhTX/AFHv/JP/AOzr1CigCrpll/ZukWdj5nmfZoEh37cbtqgZx26VaoooAz9e0+XVNEns7dkWSTbguSBwwPYH0rjf+EB1T/nvZ/8Afbf/ABNehUUAef8A/CB6n/z3tP8Avtv/AImmt4B1Qn/X2f8A323/AMTXoVFAHml78ONXuI1VLiyBDZ5d/wD4mqX/AAq3W/8An6sP+/j/APxFesUUAeT/APCrdb/5+rD/AL+P/wDEU8fC/WgB/pVh/wB/H/8AiK9VooA8of4Xa03S6sP+/j//ABFKnwu1pXBN1Yf9/H/+Ir1aigDy7/hWes/8/Nj/AN/H/wDiK9RoooAKzPEemzax4fubG2ZFll27TISFGHB7A+ladFAHmP8AwrXWP+fmx/7+P/8AE1D/AMKw1r/n5sP+/j//ABFeqUUAeQ3Hwn12aXct3p4GMcyP/wDEVC3wh18j/j703/v7J/8AEV7JRQB4z/wp/X/+fzTf+/sn/wARTf8AhTviD/n803/v7J/8RXtFFAHi/wDwp3xB/wA/mm/9/ZP/AIinL8H9fHW803/v7J/8RXs1FAHj0Pwk16OdHa707CnJxJJ/8RWh/wAKz1n/AJ+bH/v4/wD8RXqNFAFXS7V7LSLO1lKl4IEjYr0JVQDj8qtUUUAVdTtnvdIvLWIqHngeNS3QFlIGfzrzr/hWusf8/Nj/AN/H/wDia9PooA4q28HahDaRRNNbFkUA4Zsf+g1Q1b4f6rfzRNDcWahFIO529f8Adr0SigDywfDHWQf+Pmx/7+P/APEU7/hWes/8/Nj/AN/H/wDiK9RooA4D/hBNT/572n/fbf8AxNU7j4c6vLOXW4sgCB1d/wD4mvS6KAPKLv4Xa1OihLqwGDnmR/8A4ioYfhPrkc6O13p+FbJxI/8A8RXrtFAHmf8AwrfV/wDn5sv+/j//ABNeh6ZbPZ6TaWspUvBAkbFehIUA4/KrNFABVLWbOTUdCv7KEqslzbSRIXOACykDPtzV2igDxn/hT+v/APP5pv8A39k/+Iqwnwn11UAN3p/A/wCej/8AxFevUUAeTR/CzW0Bzdafz/00f/4irEHwz1mKYO1zY4Gekj//ABFeo0UAecf8K91b/n4s/wDvt/8A4mo/+Fc6v/z8WX/fb/8AxNel0UAeWS/DHWZJCwubHHvI/wD8RUMvwr1twMXWn8esj/8AxFes0UAeRD4Ua4D/AMfen/8Afx//AIinf8Kq1z/n60//AL+P/wDEV63RQBU0m0ew0WytJirSW9vHExU8EqoBx7cVboooApazZyajoN/ZQFVkubaSJC5woLKQM+3NeS/8Kf1//n803/v7J/8AEV7PRQB5ra/DnV4LSKJ7iyLIgU4d8f8AoNWI/AOqIDmez/77b/4mvQqKAPMNc+GusanpElrBc2KuzKQXkcDg57LXLf8ACj/EmR/p2ldf+e0n/wAbr3iigDzr/hX2q4H+kWfT++//AMTWXffCvW7m7aWO608KQB80j5/9Ar1migDyO3+FOuRMS11p5yO0j/8AxFT/APCr9a/5+rD/AL+P/wDEV6rRQB5X/wAKw1r/AJ+bD/v4/wD8RXpWl2r2Oj2dpKVMkECRsVPBKqAce3FWqKACq2o273ml3VtGVDzQvGpboCVIGas0UAecf8K91b/n4s/++3/+JrMn+FWuS3EjrdafhmJGZH/+Ir1qigDyA/CbXT/y96d/38f/AOIpkvwj154you9Oz7yyf/EV7FRQB4t/wpzxB/z+ab/39k/+Ird/4Vxq/wDz82X/AH2//wATXplFAHCWngjUoLZY3ntSQT0dv/iai1DwHqd3Gixz2gKsSdzt/wDE16BRQB5e/wANNYaNgLmxyR/z0f8A+Jqv/wAKs1v/AJ+tP/7+P/8AEV6xRQBU0q1ex0aytJipkt7eOJip4JVQDj24q3RRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAf/9k=)

(a)“Barbara” (b)ICA basis of “Barbara”

(c)“Airplane” (d)ICA basis of “Airplane”

Figure1. Images and Their ICA basis

＊2.2 Conventional Method＊

・2.1で述べたように，局所的特徴を持つブロックはICAの結合係数がスパースとなるため，ICAを用いたほうが少ない符号量で保存することができる．

・一方，規則的な特徴の領域は，ICA基底の結合係数がスパースにならないため，DCTを用いたほうが少ない符号量で保存することができる．

・このことから，符号量削減の観点で，入力画像をDCT基底あるいはICA基底による保存が優位なブロックに分類し，それぞれのブロックをDCTおよびICAを用いて符号化することで，画像全体の符号量を少なくすることができる．

・このとき，DCTについては，DCT基底の結合係数に対して量子化テーブルを用いることで，符号量の制御を行っている．

・それに対して，ICA基底を保存する符号量の観点から，使用する基底の数を少なくするため，[3，4]では，ブロックの保存に対する各ICA基底の重要度を，MP法[8]に基づくブロックと基底の類似度により決定し，重要度の高い基底から選択することで，符号量の制御を行っている．

・ブロックごとに原画像とのMSEが同じになるときのDCTとICAを適用し，符号量を比較することでDCT\_BlockとICA\_Blockのそれぞれの候補が決定される．

・ICA\_Blockの候補は，64個のICA基底をすべて使える条件でDCTよりも符号量を少なくすることができるブロックとして定義される．

・すべてのICA\_Blockの候補をICA\_Blockとした場合，ICA基底を保存するための符号量が大幅に増加することから，各ICA基底の組み合わせを評価するためだけに使用され，最終的なICA\_BlockはICA\_Blockの候補から決定される．

・実際に使用されるICA基底の組み合わせが決定したときに，それらが適用されるブロックがICA\_Blockとなり，それ以外のブロックがDCT\_Blockとなる．

・使用可能な基底の選択において，[3，4]では，それぞれのブロックの画質を最適にするICA基底に着目し，ICA\_Blockの候補に対して各基底がDCTから改善できる画質を評価することで，重要となる基底を決定している．

・[3]では，ハイブリット型画像符号化を適用することで，DCTを使用したものと同等の画質を保存するために必要な基底の符号量を80%以上削減できることが明らかになっている．

・また，[4]では，ICA基底の符号量を加えた場合に，超低符号化レートにおいてDCT単独のものよりも符号化性能を向上できることが明らかになっている．

・従来のハイブリット型符号化方式の課題は次の通りである．

・1つ目は，ICAの量子化において適切な基底が選択されていないことである．

・ICAの結合係数はスパース性を持っているが，1種類の基底のみでDCTと同等の画質を保存できるブロックは限られているため，複数種類の基底を組み合わせて使用される．

・そのため，ブロックの保存に対する重要度は，複数種類の基底を組み合わせることを考慮すべきである．

・2つ目は，重要なICA基底の選出において，符号化性能の向上という観点では，ブロックの画質を最適にする基底以外にも有効な基底が存在していることである．

・また，ICA基底を用いなくても輝度の平均値のみで再構成可能なブロックの存在が確認されている．

・そのため，複数のICA基底を使用するという条件下では，従来手法がICA\_Blockの候補としていたブロックや評価対象としていた基底では，符号化性能の改善に対して最適とは言えない．

・3つ目は，従来手法が符号化性能を改善できる範囲は20[dB]前後の超低符号化レートであるため，適用する範囲としては非現実的なことである．

・次章では，これらの課題を解決するためのICA\_Blockにおける新たな手法を提案することにより，DCTとICAの基底を併用したハイブリット型符号化方式の性能を改善する．

＊＊3. Proposed method＊＊

・提案するハイブリット型画像符号化方式の構成をFig.3に示す．

・Fig3.では，まず，入力画像を一様に画素のブロックに分割し，各ブロックに対してDCTとICAを適用することで，DCT係数とICA係数，ICA基底を求める．

・提案方式では，DCTはJPEGに基づく量子化テーブルによって量子化され，ICAはMSEによる原画像との画質比較に基づいて，DCTの画質と同じになるようにMP法を適用することで量子化される．

・領域分割では，まず，ブロックごとにDCT係数の符号量とICA係数の符号量を求める．

・ここで，DCT係数の符号量は，DCTの結合係数の平均情報量とし，ICA係数の符号量は，ICA係数の結合係数とブロックの平均値の情報を合計したときの平均情報量として算出している．

・その後，ICA係数の符号量がDCT係数の符号量よりも小さい場合はICA\_Blockの候補とし，それ以外を DCT\_Blockの候補とすることで，入力画像のすべてのブロックをICA\_BlockまたはDCT\_Blockに一旦分類する。

・重要なICA基底の選出では，ICA\_Blockの候補に対する符号化性能の改善という観点で各ICA基底の組み合わせの評価を行う．

・このとき，前節で述べたように，ブロックの符号化性能を改善できるすべてのICA基底の組み合わせを評価の対象としている．

・その後，基底を保存するための符号量を加えた場合でもDCT単独の符号量よりも改善する基底の組み合わせにおいて，画像全体の画質を最大とするものを重要なICA基底であると決定し，それらが用いられているブロックに加え，ブロックの平均値のみで画質を改善できるブロックを最終的なICA\_Blockとして決定する．

・以上の処理により，実際に使用するICA基底とICA\_Block，それらを除いたものとしてDCT\_Blockが決定され，それぞれのブロックにDCT及びICAを適用することで符号化が行われる．

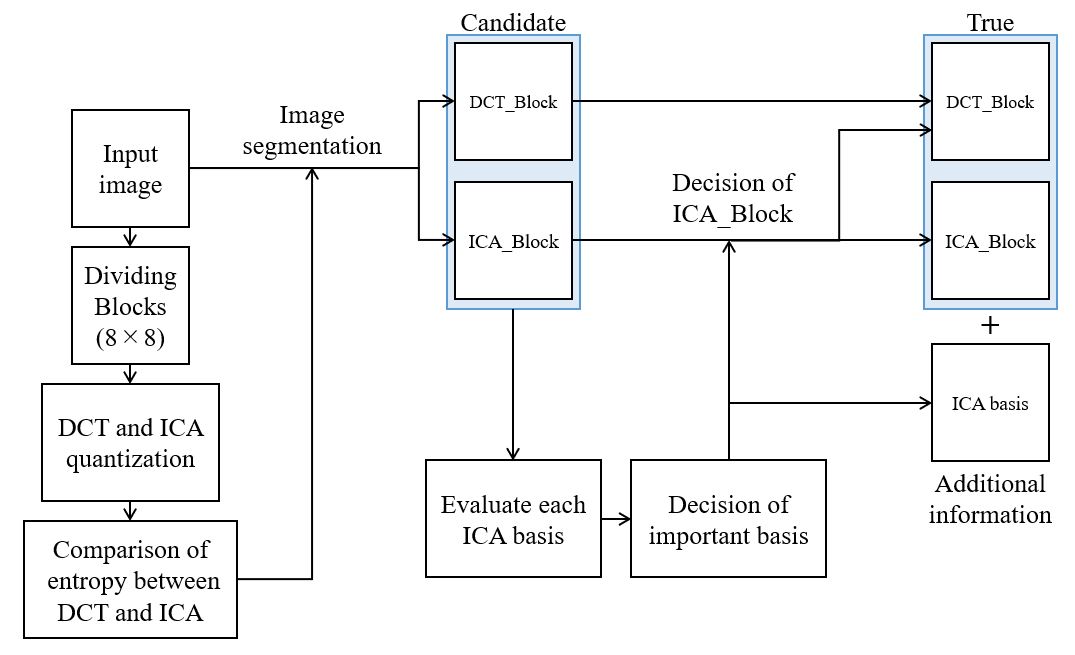


Figure3. Configuration of hybrid image coding using DCT and ICA basis

＊3.1 ICA\_Blockの候補の決定 ＊

・提案方式の画質評価はPSNRであり，選出する基底の評価もMSEによって行われるため，量子化で用いられる重要度にもMSEを使用する．

・また，ICAの結合係数はスパース性を持っているが，1種類の基底のみでDCTと同等の画質を保存できるブロックは少数であり，複数種類の基底を組み合わせて保存する場合が多い．

・画像“Airplane”に対して，の条件で従来手法の量子化を適用し，ICA\_Blockの候補に分類された各ブロックにおいて，保存に必要なICA基底の個数とそれを必要とするブロック数をFig.4に示す．

・Fig.4を見ると，1種類のICA基底のみでDCTと同等の画質を保存できるブロックは多く存在しているが，それ以上に，複数種類の基底を組み合わせて保存するブロックが存在していることがわかる．

・そのため，ICAの量子化において，基底の組み合わせを考慮したときの原画像とのMSEに基づいてブロックの保存に対する重要度を提案することで，従来手法の量子化における課題を解決する．

・その手法として，入力画像の各ブロックに対して，MSEを最小にするICA基底を求め，をそのブロックで最も重要な基底とする．

・次に，と組み合わせた場合に最もMSEを小さくできるICA基底(，ただし)をそのブロックで2番目に重要な基底とする．

・64個のICA基底において重要度が決定されるまでこの処理を続け，全てのブロックにおいて基底の重要度を求めておく．

・DCT\_BlockとICA\_Blockの候補の分類において求められた重要度に従って，DCT単独の画質を上回るよう画質を制御したとき， によりDCT単独のものからの画質と符号量の改善値を求める．

・ここで，はDCT単独で，はICA基底を重要基底の順に個使用して小領域を再構成したときの原画像との平均二乗誤差(MSE)であり，はDCT単独で，はICA基底を個使用して小領域を再構成したときの結合係数とブロックの平均値の情報を合計したときの平均情報量を示している．

・式(4)と式(5)が正となる，すなわち，DCT単独よりも画質を高くかつ，符号量を削減できるブロックをICA\_Blockの候補とする．

また，それ以外のブロックをDCT\_Blockの候補とする．

Figure4. Number of ICA basis for reconstruction in each block

＊3.2 使用するICA基底の決定 ＊

・提案方式では，画像が入力されると64個のICA基底が導出される．

・それらは入力画像に固有で，それぞれが局所的な特徴を表しているため，符号化性能の改善に対して有効なICA基底の種類はブロックごとに異なる．

・画像“Barbara”に対しての条件で提案手法の量子化を適用し，分類されたICA\_Blockの候補のうち，23番目及び40番目のICA基底が選択されたブロックをFig.5に示す．

・Fig.5の左上にはそれぞれのICA基底を表示している．

・Fig.5を見ると，ICA基底によって，それが使用されるブロックは異なることが分かる．

・しかしながら，単独ではなく複数の基底の組み合わせによる表現を考えた場合，一つのブロックにおいて，符号化性能を改善できる基底の組み合わせは複数存在する．

・画像“Airplane”に対しての条件で1000番目のブロックを保存するとき，DCT単独のものよりも符号化性能を向上できるICA基底の組み合わせをTable.1に示す．

・Table.1を見ると，一つのブロックの保存に有効なICA基底の組み合わせは複数存在していることが分かる．

・ブロックの画質を最大にできるICA基底のみを評価している従来手法では，Table.1(a)がそのブロックの符号化性能を改善できる基底として評価され，Table.1(b)，(c)は評価されていない．

・そのため，すべての組み合わせを評価の対象に加えることで，ICA\_Blockの候補の保存に対する各ICA基底の組み合わせの重要度を正しく評価することができる．

・このとき，[3，4]から低符号化レートにおいて2つ程度の基底の符号量を考慮しても符号化性能が改善されることが明らかとなっているため，提案手法では，基底を3つまで使用できるものとした．

・加えて，従来手法のICA\_Blockでは，必ずICA基底を使用する条件であったが，実験により基底を使用せずに平均値を用いるだけでDCT単独のものよりも画質を高く保存できるブロックの存在が確認されている．

・画像“Barbara”に対しての条件でICAを適用したとき，ICA基底を使用せずにDCT単独のものよりも画質を高く保存できるブロックをFig.6に示す．

・Fig.6を見るとPSNRが30[dB]の実用的な符号化レートでもいくつかのブロックは平均値のみで再構成できることが分かる．

・ICAの平均値のみでブロックを保存するとき，平均値を保存するための符号量を必要とするが，ICA係数やICA基底を保存するための符号量は必要ないため，性能改善の観点で非常に有効である．

・提案する最適なICA基底の選出法を以下に示す．

・まず，式(4)と式(5)から求められる改善量の合計である，各の画質改善量と削減符号量を，で求める．

・ここで，式(6)，(7)におけるICA\_Blockは，先に求められたICA\_Blockの候補から図6に示す基底を必要としないブロックを除いたものである．

・上記の処理により，各基底の組み合わせを用いたときに，DCT単独から削減できる符号量や改善できる画質が求められる．

・この結果，ICA基底の組み合わせごとに基底の保存に必要な符号量とDCT単独から削減できる符号量を比較することができるため，基底の符号量を考慮した上で符号化性能の改善を評価することができる．

・ICA基底を用いる符号化においては，ICA\_Blockの結合係数から求められる符号量の他に，使用する基底を表すための符号量とブロックの直流成分を表すための符号量が加わるため，が少ない基底の組み合わせを使用した場合に，付加情報を考慮しないDCT単独のものよりも符号化性能が劣化する可能性がある．

・そこで，基底の選出は，ICA基底の付加情報を考慮した上で符号化性能を改善できることを評価する手法でなければならない．

・図6に示したブロックにおいて，ブロックの平均値を保存するための符号量をとするとき，式(8)を満たし，が最大となるを入力画像の保存に重要な基底として選出し，が使用されるICA\_Blockを入力画像に対するICA\_Blockとして決定する．

・

・ここでは，使用するの基底を保存するための符号量であり，式(8)はICA基底を保存するための符号量を加えても，DCT単独よりも全体の符号量が少なくなることを意味している．

・上記の処理により，ICA基底を表す符号量を考慮した上で，画像全体の画質を最大にできる最適な基底の組み合わせとそれが適用されるICA\_Blockを求めることができる．

![グラフィカル ユーザー インターフェイス, アプリケーション

自動的に生成された説明](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDiRXhpZgAATU0AKgAAAAgABAE7AAIAAAANAAAISodpAAQAAAABAAAIWJydAAEAAAAKAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOS4reeUsOmbhOWkpwAAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzA3AACSkgACAAAAAzA3AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIxOjEwOjIzIDEyOjE4OjM5ADIwMjE6MTA6MjMgMTI6MTg6MzkAAAAtTjB1xJYnWQAA/+ELH2h0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMTAtMjNUMTI6MTg6MzkuMDcxPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPuS4reeUsOmbhOWkpzwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAGQAY8DASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RoqlrUjxaDfyRMyOltIyspwVIU8g18rf8LK8Zf8AQw3v/fY/wrNylzcsUaKMeXmk/wCvvPraivkWb4meM1jyviK9Bz/eH+FQf8LR8bf9DHe/99D/AAovU7L7/wDgDtT7v7v+CfYNFfKVh8RfF09oHl8QXrNkjO/FWT8QPFYU/wDE+ven/PSi9Tsvv/4AWp9393/BPqSivkb/AIWZ4z/6GK9/76H+FV734o+NoYQ0fiO9B3Y+8P8ACi9Tsvv/AOAFqfd/d/wT7Bor4w/4Wz47/wChmvfzX/Cuh0j4i+L7rTI5Z/EF67knJ347+1F6nZff/wAALU+7+7/gn1dRXzAvjzxSXUHXb3BP/PStX/hMPEX/AEGr3/v8aL1Oy+//AIAWp9393/BPoqivm668aeJY4wU1u9Bz/wA9TVX/AITrxR/0Hb3/AL+mi9Tsvv8A+AFqfd/d/wAE+m6K+LPiF4+8X2+q2H2XxTrNuJLIM6wX8sak+bIM4VgM4AH4Vyf/AAsfxv8A9Dl4g/8ABpP/APFVUZcyuTOPK7H3/RXwB/wsfxv/ANDl4g/8Gk//AMVR/wALH8b/APQ5eIP/AAaT/wDxVUQff9FfAH/Cx/G//Q5eIP8AwaT/APxVH/Cx/G//AEOXiD/waT//ABVAH3/RXwB/wsfxv/0OXiD/AMGk/wD8VR/wsfxv/wBDl4g/8Gk//wAVQB9/0V8Af8LH8b/9Dl4g/wDBpP8A/FUf8LH8b/8AQ5eIP/BpP/8AFUAff9FfAH/Cx/G//Q5eIP8AwaT/APxVH/Cx/G//AEOXiD/waT//ABVAH3/RXwB/wsfxv/0OXiD/AMGk/wD8VR/wsfxv/wBDl4g/8Gk//wAVQB9/0V8Af8LH8b/9Dl4g/wDBpP8A/FUf8LH8b/8AQ5eIP/BpP/8AFUAff9FfAH/Cx/G//Q5eIP8AwaT/APxVH/Cx/G//AEOXiD/waT//ABVAH3/RXwB/wsfxv/0OXiD/AMGk/wD8VR/wsfxv/wBDl4g/8Gk//wAVQB9/0V8Af8LH8b/9Dl4g/wDBpP8A/FUf8LH8b/8AQ5eIP/BpP/8AFUAff9FfAH/Cx/G//Q5eIP8AwaT/APxVH/Cx/G//AEOXiD/waT//ABVAH3/RXwB/wsfxv/0OXiD/AMGk/wD8VR/wsfxv/wBDl4g/8Gk//wAVQB9/0V8Af8LH8b/9Dl4g/wDBpP8A/FUf8LH8b/8AQ5eIP/BpP/8AFUAff9FfAH/Cx/G//Q5eIP8AwaT/APxVH/Cx/G//AEOXiD/waT//ABVAH3/RXwB/wsfxv/0OXiD/AMGk/wD8VR/wsfxv/wBDl4g/8Gk//wAVQB9/0V8Af8LH8b/9Dl4g/wDBpP8A/FUf8LH8b/8AQ5eIP/BpP/8AFUAff9FeQfs1a3quvfDbULrXNTvNSuE1aSNZby4aZ1UQwkKCxJxkk49zXr9AFDXv+Rc1L/r1l/8AQDXxhg+hr7P17/kXNS/69Zf/AEA18b1mv4j9F+pq/wCGvV/oU7hT5XQ9fSq+1v7p/KtKX7n41DWhkaGkxSNp4KxsRuPQVcaGXa37p+h/hrR8OH/iTL/vtWm5/dv/ALp/lQB57tb+6fyqnqQItlyCPm71r1na3/x5J/v0AY2a63QP+QNF/vN/OuPrrfD/APyBYv8Aeb+dAGsn+sX/AHhW6Ub+635Vgxf6+P8A3h/OuvPWgDFvlIiXII+buKo1saz/AMe0f+/WPQBw3xH/AOQppv8A14f+1pa4+uw+I/8AyFNN/wCvD/2tLXH1nT+H5v8ANmtX4vkvyQUUUVoZBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH1t+yp/ySzUv+w1L/wCiIK9trxL9lT/klmpf9hqX/wBEQV7bQBQ17/kXNS/69Zf/AEA18f8A2Nv74/KvsDXv+Rc1L/r1l/8AQDXyVWa/iP0X6mr/AIa9X+hn3MBih3FgecVUzWjqH/HsP94Vm1oZHa+FrVptCVwwH7xhg1rPYN5b/Ov3T29qpeD/APkXU/66tW3J/qn/AN0/yoA86+wt/fX8qzNftGjsEJYH94K6CsjxL/yDY/8ArqP5UAcr5Z9a67w/Gf7Fi5/ib+dcrXW+H/8AkCxf7zfzoA0oYibiPn+MfzrszZtn74/KuQh/4+Iv98fzruj1oAwtatWW1j+Yff8A6VjfZz6iui1z/j1j/wB/+lYlAHnnxJXbq+mg/wDPgP8A0dLXG12fxN/5DWnf9eA/9GyVxlZ0/h+b/NmtX4vkvyQUUUVoZBRRRQAUUUUAFFFFABRRRQB7t4aj0ix0fTribTrK4iv7ZYHLwKxR8AZ5HWtS78O6SngTdcabaR3lvc+W7LCuSrdD09xXi+n+K5LG0S3VZGjXBxnoR3FdXB8Vraa+lk1axuJYJoAkkcbKMuCCG5+goA6y78Ex6NaS77C3ky3DGIHAPTtXht6oTULhQAAJWGB9a9qb486TPMq3Wi3b2xtRDIgdMlwDhhXil5MlxfTzRqVSSRnUHqATkUAQ0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9bfsqf8AJLNS/wCw1L/6Igr22vEv2VP+SWal/wBhqX/0RBXttAFDXv8AkXNS/wCvWX/0A18wfY4P+eYr6f17/kXNS/69Zf8A0A181/Zp/wDnjJ/3zWa/iP0X6mr/AIa9X+hh63bxR6cGRADvAzXP4rqPEEEy6WC0TgeYOormvKk/uN+VaGR6F4KjVvDKFhk+a9bzwx+W3y/wn+VYnglSvhlAwIPmv1ref/Vt/un+VAHG/ZYP+eYrH8S2sP8AZsf7sf60fyre2t6GsjxKjHTY8Kf9aO3tQByP2WH/AJ5iup0OCIaRGAgxuP8AOud8t/7p/Kun0RH/ALJj+U9T296AL0MMf2iL5f4x/Ou5MSZ+7XFwo32iL5T98dveu2PWgDK1uJPssfy/x/0rE8qP+7W9rYJtY8DPz/0rF2t/dP5UAeY/FIBde08AYH2Af+jZK4mu3+KYx4gsM/8APgP/AEbJXEVnT+H5v82a1fi+S/JBRRRWhkFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfW37Kn/JLNS/7DUv8A6Igr22vEv2VP+SWal/2Gpf8A0RBXttAFDXv+Rc1L/r1l/wDQDXh2a9x17/kXNS/69Zf/AEA147/ZZ/56j8qzX8R+i/U1f8Ner/Q5fxUf+JKP+uq1x1eheJdHaXSQomA/eA/drlf+Eef/AJ+V/wC+a0MjofCf/IAX/ro1bLfcb6Gs3QLY2WkrCW3kOxyBitFj8jfQ0Ac5WV4h/wCQen/XQVrbazdch82xQbsfvAaAOYrptE/5BMf1P86wvsR/vj8q6TRrUrpcY39z296ALcX+uT/eH866k9a5uO3PnJ838Q7V0xWgDP1X/j3T/erLrY1GHzIUG7GGrP8AsZ/vj8qAPIviv/yMlj/14L/6Nkrhq7v4tp5fieyXOcWC8/8AbSSuErOn8Pzf5s1q/F8l+SCiiitDIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+tv2VP+SWal/wBhqX/0RBXtteJfsqf8ks1L/sNS/wDoiCvbaAKGvf8AIual/wBesv8A6Aa8tr1LXv8AkXNS/wCvWX/0A15x5Sf3RWa/iP0X6mr/AIa9X+hha9/yDR/10Fc3Xc3ttDLb7ZI1Zd2cGqH9m2X/AD7JWhkZWn/8eY/3jVhvuN9DU8sMcMmyJAi4zgVGQNp47UAc7VDV/wDj0X/frd8mP+4Kq39vC1uA0YI3UAcpXQ6R/wAg1Pqah+x2/wDzyWtOyijS1VUQAZPFADo/9an+8K6CsaNF85OP4hXTGGP+4KAMq8/1a/WqldB9mhfh41IpPsVt/wA8VoA+fvjB/wAjXZ/9eC/+jJK4GvRvjcix+OLZI12qLBMAf7715zWdP4fm/wA2a1fi+S/JBRRRWhkFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfW37Kn/JLNS/7DUv/AKIgr22vEv2VP+SWal/2Gpf/AERBXttAFDXv+Rc1L/r1l/8AQDXneK9E17/kXNS/69Zf/QDXntZr+I/Rfqav+GvV/oQzozx4RSxz0FV/s83/ADyb8q0of9Z+FTVoZHL3iMlyQ4KnA4NQHofpV/Wf+Qk3+6KoUAZ/lv8A3TUF3BK8ICRsxz0ArUpR1oA577Hc/wDPB/yq7bQSrAA0bA56EVrZpDQBSjik85PkP3h2966gwy/3G/KsaL/XR/7w/nXVnrQBnLBLn/Vt+VO8iX/nm35Vop1NSUAfNPxzUr48gDDB+wJx/wADevNq9O+Pn/JRIv8Arwj/APQnrzGs6fw/N/mzWr8XyX5IKKKK0MgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD62/ZU/wCSWal/2Gpf/REFe214l+yp/wAks1L/ALDUv/oiCvbaAMjxbeR6d4K1u9nDNFbafPM4QZJCxsTj34r5y/4X54e/6Bupf98x/wDxVfQHxH/5JZ4r/wCwLef+iHr4AqHC7unY0jOys1c+gU+P3h5Gz/ZmpH/gMf8A8VT/APhoPw9/0C9S/KP/AOKr57opckv5n+H+Q+eP8q/H/M90vPjd4eu7ky/YdSTIAx5cZ/8AZ6g/4XL4e/59NS/79R//ABdeJUUckv5n+H+Qc8f5V+P+Z7X/AMLj8Pf8+mpf9+o//i6B8ZPDw/5dNS/79R//ABdeKUUckv5n+H+Qc8f5V+P+Z7Z/wuTw9/z6al/36j/+Lo/4XJ4e/wCfTUv+/Uf/AMXXidFHJL+Z/h/kHPH+Vfj/AJntq/GXw8rq32TUjtIP+qj/APi61v8AhoHw9/0DNS/75j/+Kr58oo5JfzP8P8g54/yr8f8AM+hF/aC8PL/zC9S/KP8A+Kpf+GhPD3/QL1L8o/8A4qvntEaRtqKWb0Ayad5MoODG+f8AdNHJL+Z/h/kHPH+Vfj/mdZ8S/F1n408UR6np0M8Ea2yxFJwAchmPYnjkVyFK6NGxV1KsOoIwaSqjHlViJS5ncKKKKokKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigB0SeZMiZxuYDPpXTv4MCXAT7YSh43+X3/Ouatv+PqL/AHx/OvVti+R5RmjJ8zJO8d6AONh8GNLMgNyRGxPz+X/9epW8EKLKa4F8SI1Y48vrgZ9a7mX7OkMVvFNGSGwTvHeotQt4rTR7uJLiJwqP0cc/LQB49RRRQAUUUUAfW37Kn/JLNS/7DUv/AKIgr22vEv2VP+SWal/2Gpf/AERBXttAHN/Ef/klniv/ALAt5/6IevgCvv8A+I//ACSzxX/2Bbz/ANEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFAHVfDS3W6+IGnRPL5SneWbPQBGNeifZLe98WF0X/RYWGBjqBXkGiaq2i6xBfpEJjET8hYqGyMdR9a6+x+KclldXEw0W3cTYAUythAPSgDI+I8iy/EDU3ThS64/74WuYrR1/Vzr2u3OpNAtuZ2B8pGJC4AHU/Ss6gAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+tv2VP8Aklmpf9hqX/0RBXtteJfsqf8AJLNS/wCw1L/6Igr22gDnPiIjSfC/xSkas7to92FVRkkmF+AK+DP7F1X/AKBl5/4Dt/hX6Haj/wAgu6/64v8A+gmuBDE9HNAHxPcWtxaSeXdQSQORnbIhU49cGoq9R/aAJb4iQEnP/Evi/m1eXUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH1t+yp/ySzUv+w1L/wCiIK9trxL9lT/klmpf9hqX/wBEQV7bQBj+L9RfR/A+u6nEiyPZadcXCo/RikbMAfbivlQftEayOmh6f/30/wDjX0/8R/8Aklniv/sC3n/oh6+AKAOj8b+MrnxxrqapeWsNrIkCwhISSCASc8/WucoooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPrb9lT/klmpf9hqX/ANEQV7bXiX7Kn/JLNS/7DUv/AKIgr22gDm/iP/ySzxX/ANgW8/8ARD18AV9//Ef/AJJZ4r/7At5/6IevgCgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPrb9lT/klmpf8AYal/9EQV7bXiX7Kn/JLNS/7DUv8A6Igr22gDm/iP/wAks8V/9gW8/wDRD18AV9//ABH/AOSWeK/+wLef+iHr4AoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD62/ZU/wCSWal/2Gpf/REFe214l+yp/wAks1L/ALDUv/oiCvbaAOb+I/8AySzxX/2Bbz/0Q9fAFff/AMR/+SWeK/8AsC3n/oh6+AKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+tv2VP+SWal/2Gpf/AERBXtteJfsqf8ks1L/sNS/+iIK9toA5v4j/APJLPFf/AGBbz/0Q9fAFff8A8R/+SWeK/wDsC3n/AKIevgCgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPrb9lT/klmpf9hqX/ANEQV7bXiX7Kn/JLNS/7DUv/AKIgr22gDm/iP/ySzxX/ANgW8/8ARD18AV9//Ef/AJJZ4r/7At5/6IevgCgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAHxwyTEiJC2OuKk+xXJ6Qt+VWdIGZpP90fzrYiQvKAvrQBy5GDg9aKdKMTOP9o02gAooooAKKKKACiiigAooooAKKKKACiiigAooooA+tv2VP8Aklmpf9hqX/0RBXtteJfsqf8AJLNS/wCw1L/6Igr22gDm/iP/AMks8V/9gW8/9EPXwBX3/wDEf/klniv/ALAt5/6IevgCgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAJYLmS2YmIgFhg5FWotavIZFkRk3KcjKCqFFACuxd2ZurHJpKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD62/ZU/5JZqX/Yal/wDREFe214l+yp/ySzUv+w1L/wCiIK9toA5v4j/8ks8V/wDYFvP/AEQ9fAFff/xH/wCSWeK/+wLef+iHr4AoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD62/ZU/5JZqX/AGGpf/REFe214l+yp/ySzUv+w1L/AOiIK9toA5v4j/8AJLPFf/YFvP8A0Q9fAFff/wAR/wDklniv/sC3n/oh6+AKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA+tv2VP8Aklmpf9hqX/0RBXtteJfsqf8AJLNS/wCw1L/6Igr22gDm/iP/AMks8V/9gW8/9EPXwBX3/wDEf/klniv/ALAt5/6IevgCgAooooAKKKKACiiigAooooAKKKKACiiigAooooAK9T8EeC9K1jwlqFxe2Qlu1s/NhYuwwd2M4BryyvXPCHxB8P6LomnRXU8iTx25trlBCxBUknOfxoAyPG3g2w0fwNpGrWEG1rhQsr7ictgZrzqvUPF3jfQ9V+H8+h2NxJLLFdrJa7oWXKZOck9O1eX0AFFFFABRRRQAUUUUAFbfhaytrzUnN9B58ESbnXJHcDt9axK6bwbqmmaaurDVpXj+0WnlwlULZfep7dOAaAPQNM8A6DLcDzLJZUklKoPMbgfnXkWpwrbatdwRrtSOd0UegDEV65onxA8L2F9byTXk4jWBd4+zscP3ryTVJ0utYvLiE5jlnd0JGMgsSKAKtFFFABRRRQAUUda6P/hA9eOP9GTkZH71f8aAOcorR1fQb/QzENRiWPzQSmHDZx9KzqACiiigAooooAKKKKACiiigAooooA+tv2VP+SWal/2Gpf8A0RBXtteJfsqf8ks1L/sNS/8AoiCvbaAOb+I//JLPFf8A2Bbz/wBEPXwBX3/8R/8Aklniv/sC3n/oh6+AKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigBV+8PrXvqQEwx/wC4v8hXgNbo8beIwABq0+AMDp/hQB0vxTi8v+zM9SJP6V57V/U9c1LWfL/tS8kufKzs34+XPWqFABRRRQAUUUUAFFFFABRRRQAUUUUAfW37Kn/JLNS/7DUv/oiCvba8S/ZU/wCSWal/2Gpf/REFe20Ac38R/wDklniv/sC3n/oh6+AK+/8A4j/8ks8V/wDYFvP/AEQ9fAFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfW37Kn/JLNS/7DUv/AKIgr22vEv2VP+SWal/2Gpf/AERBXttAHN/Ef/klniv/ALAt5/6IevgCvv8A+I//ACSzxX/2Bbz/ANEPXwBQAVu+CLO31Dx1o1pexJNbzXaJJG/3WUnkGsKrmkXv9naxa3mWHkSh8r1GKAPqEfD7wWzSMnh+wMUfLvs4HsOa8L+Lul2OkeOvs+l2EVhbNaRSLDEuByDz+NdJpfxgtrVYLe6Fw9sku9wFGX9utcZ8RvFcXjLxhLqtsjpCY1jjVxggLnAoA5WiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAPrb9lT/klmpf8AYal/9EQV7bXiX7Kn/JLNS/7DUv8A6Igr22gDm/iP/wAks8V/9gW8/wDRD18AV9//ABH/AOSWeK/+wLef+iHr4AoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD62/ZU/wCSWal/2Gpf/REFe214l+yp/wAks1L/ALDUv/oiCvbaAMjxZpU+veC9b0izaNLjUNPntYmlJCKzxsoLEAnGTzgGvmD/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA+Sf+GVPG/wD0FfD/AP4ET/8Axmj/AIZU8b/9BXw//wCBE/8A8Zr62ooA87+Cnw/1X4ceC7vSNcuLOe4m1B7pWs3ZkCmONQCWVTnKHt6V6JRRQB//2Q==)![グラフィカル ユーザー インターフェイス, アプリケーション

自動的に生成された説明](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDiRXhpZgAATU0AKgAAAAgABAE7AAIAAAANAAAISodpAAQAAAABAAAIWJydAAEAAAAKAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOS4reeUsOmbhOWkpwAAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzY3AACSkgACAAAAAzY3AADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIxOjEwOjIzIDEyOjE5OjA5ADIwMjE6MTA6MjMgMTI6MTk6MDkAAAAtTjB1xJYnWQAA/+ELH2h0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMTAtMjNUMTI6MTk6MDkuNjY1PC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPuS4reeUsOmbhOWkpzwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAGOAYwDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RoyKoa9/yLmpf9esv/oBry/yIv8Ankn/AHyKzcpc3LFf19xqox5eaT/r7z1/IoyK8R1hFisVaJQh3gZUYrE82T++350Xqdl9/wDwAtT7v7v+CfRORRkV8ceK9W1G28RzRW9/dRRhVwiTMoHHoDWZaa3qrX1uraneEGVQQbh+efrRep2X3/8AAC1Pu/u/4J9tZFGRXziZpdx/eP8A99Guv+HUEV9qN8t7ElwqwqVEqhwDntmi9Tsvv/4AWp9393/BPX8ijIrnv7H0z/oHWn/fhf8ACvOvEEUcPiG8jhRY41fCqgwBx6UXqdl9/wDwAtT7v7v+CezZFGRXz7q7tHot28bFHWIlWU4INeeDVtRwP9Puv+/zf40Xqdl9/wDwAtT7v7v+CfYuRRkV83fD+eW9jv8A7ZK9xsKbfNYtt+ma7DyYv+eaf98ii9Tsvv8A+AFqfd/d/wAE9hor4K+KYA+JerADADR/+ilrkaqEuaKl3JnHlk49j9I6K/NyiqIP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jor83KKAP0jorzb9nz/AJIT4e/7ef8A0plr0mgChr3/ACLmpf8AXrL/AOgGvNNp9K9L17/kXNS/69Zf/QDXm9Zr+I/Rfqav+GvV/oY/iKVLfTFeZti+YBk1zP8AaVn/AM91/Ktzxv8A8gGP/ruv8q4GtDIwfFkiT+JJ5IjuUquD+FZtijNqVqqjJMyAD8at61/yFZPoP5VDpf8AyGbH/r4j/wDQhQB662k3+4/6M35iuv8AhzaT2epXzXMZjDQqAT35qN/vn61s+Gf+Pq4/3B/OgDqvMT+9XlPijUrOLxVfpJOqssnIx04r08da8N8a/wDI76p/12/oKAH6tqVpLo93HFOGdoiFGOprz8QyYHy1uz/6h/pWbQB2fwztZpItS2Rk4ZM/rXc/Ybn/AJ5H865j4U/6rVf96P8Aka9CoA+R/ispX4naurDBDxgj/tmtcfXZ/Fz/AJKtrf8A11T/ANFrXGVnS/hx9DWt/El6sKKKK0MgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKesUjKGWNiDwCFNADKKe0MqLuaN1HqVNMoA+2v2fP+SE+Hv8At5/9KZa9Jrzb9nz/AJIT4e/7ef8A0plr0mgChr3/ACLmpf8AXrL/AOgGvL/tLf3RXqGvf8i5qX/XrL/6Aa8pxWa/iP0X6mr/AIa9X+hz3j++aHw5GwRT/pCjk+1ec/2xJ/zyX867z4i/8izF/wBfK/yNeZ4rQyJLiIX05nc7C3GB7VLpenodasR5jf8AHzH2/wBoU2L/AFYq7pR/4ndh/wBfMf8A6EKAPoN9Ij3n963X0qxYxjTJHeM+YXGCG7VO5+c/Wo5OQMUAWhqb5/1a/nXh/jXUnPjbVP3a/wCt9fYV7GAc9K8Q8af8jtqn/XX+goAox3bXMqwsgUSHaSO1Xf7Hj/57N+VZdl/x/Q/74rpCRmgDsfhfpqRRaniRjlk7fWu8+xL/AHz+Vcf8ND+61L/eT+tdzQB8b/F9dvxZ11fSZR/5DWuLrtfjD/yVzXv+u6/+gLXFVnS/hx9DWt/El6sKKKK0MgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK9V8FeWfA0IcAsLhmXjpg15VXS6N4ym0bS0sks45VRy+9nIJyelAHXeNpdnhiWL+9g/rXlldPrPjWTWNNktJLCKPeQd6uSRXMUAfbX7Pn/JCfD3/bz/6Uy16TXm37Pn/JCfD3/bz/AOlMtek0AUNe/wCRc1L/AK9Zf/QDXhXnS/8APR/zr3XXv+Rc1L/r1l/9ANfP/wDaFt/z0/Ss1/Efov1NX/DXq/0MH4hSyf8ACNx/vG/4+F7+xrzXzZP77fnXoPj67gl8Oxqj5P2he3tXnXmJ61oZHc+G0STQomkRXYs3LDJ61vaZDF/bNj+6T/j4j/h/2hWP4TtpZvDcDxLuUu2Dn3ro9NsrhdXsiY+BcITz/tCgD3x4495+RevpXOeMCYbO1MJMZMhyV4zxXSMRvP1rlvHNxFBY2ZlbaDKQOPagDmvtE/8Az2k/76NeY+JWZvE18WYkmTkk+1egf2ha/wDPT9K8918iXxBePHyrPwfwoAj0QbtesQ3IMwyD3r0828GT+5j/AO+RXmegRPJ4k09EGWadQBXrp0m93H9z3/vCgDb8ERRpHe7I1Xlegrqtq/3R+Vc94RtJ7VLvz027iuOetdHg0AfFXxl/5LB4g/6+B/6AtcRXb/GX/ksHiD/r4H/oC1xFZ0v4cfQ1rfxJerCiiitDIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigBUR5HCRqzseiqMk1N9hu+f9Fm46/uzxWp4NGfF1jg4+Zjn/gJr1CN5hDM244uMEUAe4/ACN4vgZ4fSVGRh9pyrDBH+ky16PXMfDj/AJJ7pef7sn/oxq6egChr3/Iual/16y/+gGvmWvprXv8AkXNS/wCvWX/0A18l/wBtzf8APKP9azX8R+i/U1f8Ner/AEIfGf8AyA0/67rXDV1fiC+e+01YpEVQJA2Vrm/s6+prQyPTvAn/ACJ9t/vv/OupsP8AkJ2v/XZP51j/AA902OXwVauXYEyP0+tdVa6ZFHeQOHclZFI/OgD1RvvGuL+JP/INsP8Ars38q6M6lISfkWuI+J2qyx6Xp+I0OZm/lQByVctqf/IUn/3q0P7Zm/55R/rVWWBbuVp3JVpDkgdBQBJ4W/5G7Sv+vla95b7x+teLeFNPjbxhpILtzcrXvzaTFuP7x+tADNI6S/hWjVNIhYZEZLb+u7tTvtbf3VoA+NPjN/yWHxD/ANfA/wDQFrh67b4xnd8XtfJ7zqf/ABxa4ms6X8OPoa1v4kvVhRRRWhkFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFABJAAyT0AoAKK0B4e1oyLGNIvy7Dcqi2fJHqBiq1zY3dlt+2Ws1vvzt82MruwcHGevNAEFFFFABRRRQAUUUUAFFFFAHWeHfCVprGjG9uLqaJg5XaigjA+tJf8AhGCz0a4vPtExeMZVSowRnvWn4Vvre38JlJLiJJGnPys4Bxx2qz4lv4LrSLxLe5gIWIfKJBk9OnrQB5xRRRQBb0vUH0rUoryJFd4iSFbocgj+tdKvxEvVSFfsVviLpy3NcfRQB90/BfVZNb+EOi6hNGsTzeflE6DE8i/0ruq82/Z8/wCSE+Hv+3n/ANKZa9JoAoa9/wAi5qX/AF6y/wDoBr46xX2Lr3/Iual/16y/+gGviLe395vzrNfxH6L9TV/w16v9C5qf/HoP94Vk1oWpLTEP8wx0PNW9if3F/KtDI9L+HH/IjWv/AF0k/nXVw/8AHxH/AL4/nWN8P1X/AIQu2wo/1j9veukwB0A/KgDfI5rhviiP+JXp3/Xdv/Qa2PMf++351xfxLd/7MsPnb/XN39qAOTq1F/ql+lc9vb+83511+kqDpFuWAJ29SKALnhL/AJHLSf8Ar6WvoNvvH614l4URf+Ew0n5V/wCPle1e/FRk8D8qAMW76pVarPiD5Wt9vHB6Vj7j6n86APkf4w/8lc17/ruv/oC1xVdp8Xv+Ssa5/wBdU/8ARa1xdZ0v4cfQ1rfxJerCiiitDIKKKKACiiigAooooAKKKKACiiigAooooAKs6aA2q2gboZkB/wC+hVanRyGKVJF+8jBh9RQB9YtqP2fXtZ1YSHyrGL7HbjPBbBHH6V5P8dUEC+F7djmVbOWST1y8m7+tc/J8WtZlsIrRrOz8tJ/Pc7WzK3H3ufasXxl4zv8AxtqkV9qUUMLxRiNEgBCgfiTQBz1FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/28/+lMtek15t+z5/yQnw9/28/wDpTLXpNAFDXv8AkXNS/wCvWX/0A18Nfaov7x/KvuXXv+Rc1L/r1l/9ANfBlZr+I/Rfqav+GvV/obukA314Yrb5nCFsHjitn+yLz/nmv/fVZHg3/kOP/wBcT/Ou4rQyO28B2NxH4OtldQDvfv710L20qRs7DCqCTz2qn4L/AORVt/8Aff8AnWzdf8eU/wD1zb+VAHN/2xZf89G/75Nch8RL+3uNOsRE5JWZicj2q6Puiuc8af8AHla/9dD/ACoA5fzU9f0rvtC0+4n0G0liQFGTIO73rzo9K9c8Kf8AIp6f/wBc/wCpoAu+F9Nuo/Fmlu6AKtypPzV7oQc15L4f/wCRk0//AK7rXrlAHOeKLmK2e2EzEbg2MDNYP9p2v98/981oeOv9ZZfRv6VylAHzV8W2D/FTWmXkNIhH/fta42uv+Kn/ACUzVv8Aej/9FLXIVnS/hx9DWt/El6sKKKK0MgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKtW+mX11A01tZzyxKcF0jJA/GqtekeD0aHwnG4chZ5WDDPocUAcDLpd/Bb+fNZzxw/wDPRoyF/OqteseNbV7Lwvc2ruSI1UjnsSK8noA+2v2fP+SE+Hv+3n/0plr0mvNv2fP+SE+Hv+3n/wBKZa9JoAxfGV7/AGb4E16/8vzfsum3E2zdjdtiZsZ7ZxXwx/beif8AQK1D/wAGCf8Axmvt34j/APJLPFf/AGBbz/0Q9fAFQ4Ju/wCpcakoq36I67TPF2laVdG4t9IvGcqVw9+hGPwiFav/AAs60/6Ak3/gcP8A43XnlFL2cfP72V7WXl9y/wAj1/S/j2+k6elnbeHlaNCSDJeZPP0QVZk/aJuJInjbw5Fh1KnF2e//AAGvF6KPZx8/vYe1l5fcv8j04fGCIf8AMBf/AMDR/wDG6pan8S7PVoo47jRJ1Ebbh5d8B/OM159RR7OPn97D2svL7l/kdf8A8JhpX/QHvP8AwPX/AONV0en/ABmTTdPhs4NBZo4V2qXvck/XEdeW0Uezj5/ew9rLy+5f5HsNn8fZLK+huovDyl4XDqGu+Cff5K6L/hrPVv8AoV7P/wACX/wr58oo9nHz+9h7WXl9y/yPcdW/aWvNYaI3XhuBPKzt8u6Izn6qazv+F+yf9C8v/gX/APYV4/RR7OPn97D2svL7l/ka/irXv+Em8TXerm3+zG5Knyt+/bhQvXA9PSsiiirjFRSSM5Scm2wooopiCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACrmk2sV7q1vb3BYRyPhip5qnWhoDQrr9mbmVYYhIN8jHAUetAHZ/8INpH9kpPvuhMeq7xj27Vpx6adN0u0061LMBl/mPOW5NaH9seH/PgjOsWhiUhWPmdvWqtzr+j/26rx6patCjEBvM4xQBV8ZyXF1oN3I3OxFDn2yK8tr0XXvEFhPomqW8F3DI0yKECtknDA8V51QB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUV1OhaDp97pSXN6JcszDKvgcGgDlqK6/V/DNjY6HPdR+YJkI2hn7ZrkKAPtr9nz/khPh7/t5/9KZa9Jrzb9nz/khPh7/t5/8ASmWvSaAOb+I//JLPFf8A2Bbz/wBEPXwBX3/8R/8Aklniv/sC3n/oh6+AKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACu68NanpUPhyK3vruKKTc+VbORk8VwtFAHZeJ9atL2CZLW5RwVChV74NcbRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/wBvP/pTLXpNebfs+f8AJCfD3/bz/wClMtek0Ac38R/+SWeK/wDsC3n/AKIevgCvv/4j/wDJLPFf/YFvP/RD18AUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/wBvP/pTLXpNebfs+f8AJCfD3/bz/wClMtek0Ac38R/+SWeK/wDsC3n/AKIevgCvv/4j/wDJLPFf/YFvP/RD18AUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/wBvP/pTLXpNebfs+f8AJCfD3/bz/wClMtek0Ac38R/+SWeK/wDsC3n/AKIevgCvv/4j/wDJLPFf/YFvP/RD18AUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/wBvP/pTLXpNebfs+f8AJCfD3/bz/wClMtek0Ac38R/+SWeK/wDsC3n/AKIevgCvv/4j/wDJLPFf/YFvP/RD18AUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH21+z5/yQnw9/wBvP/pTLXpNebfs+f8AJCfD3/bz/wClMtek0Ac38R/+SWeK/wDsC3n/AKIevgCvv/4j/wDJLPFf/YFvP/RD18AUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQAUUUUAFFFeu/D22t7fwTeavd2tvN5URhj8yFW+Yt15HWgDyKivY/iJFa6X8ObTT4bG2S5kWOeeZIVDLk8DOMjpXjlABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAfbX7Pn/JCfD3/bz/6Uy16TXm37Pn/JCfD3/bz/AOlMtek0Ac38R/8Aklniv/sC3n/oh6+AK+//AIj/APJLPFf/AGBbz/0Q9fAFABRRRQAUUUUAFFFFAHbaP8M7zWPCNrryahBEt1cGCG3ZGLMQSCcjjtWm3wZvxrz6WusWjNFF5k0ojbbHx0Nd78IbV7vwLpt3driy0t55BnozF81ptbXkGi3uoMjC81eXy417quetAHkQ+Fd3/YtzqbapbLDFJ5cY8tsyn2rUu/FUHhDRrXwfe2MsktlKJbmWNwBLuG4AA+zAc+leovoxOoaToe3/AEayjE1y2OCwwcGvCPibd/bfiNq04XYDIoA9ggA/lQBpeLviBZ+JbfUkSxmia58oQF3BEao2SD9a4OiigDsvDvw8l1/RZNTOqW9pDGm4+ajEk+nFaZ+D94NFi1BtYtB5zYih2NuetrTLScfD/RYLVGK3g3SMB/tH/Ctxft8niK3geN/s9hGGVMdSKAOBv/hNqthqEdkbuGSZ037VU/KPeuJvbR7G+mtZfvwuUbHqK+htL1a5Emoa7fQM7yfuYVI/DivBvEyyp4o1FbhSsouG3KexzQBl0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8AJCfD3/bz/wClMtek15t+z5/yQnw9/wBvP/pTLXpNAHN/Ef8A5JZ4r/7At5/6IevgCvv/AOI//JLPFf8A2Bbz/wBEPXwBQAUUUUAFFFFABRRRQBPHfXcMPlRXUyR/3FkIX8qcdRvSADeXBC9P3rcfrXaeCPhbL40sftcerw2USo7ymSEt5YU47HnNaJ+C86+H4tUOuwDz5/Jgi+ztmTnGc54oA86/tK+3Fvtlxk9T5rc/rVd3eRy8jM7HqWOSa9YPwIuP7f8A7LHiG33JB508n2ZsRDGcHnmvNNa00aRrNzYLOLgQPtEqrtDe+KAKNFFFAEy3lyiKi3Eqqv3VDnApft13uJ+1TZPU+Yagre8H+GD4s1t9PF6lkEt5J2ldCwwgzjAoAyPtt1t2/aZtuc48w4qF3aRy8jFmY5LMck13LfDKRPDZ1d9WiCmbyo4vJOZOcZzmp5/hRPDq1jpy6vC810m9gIT+6HvzzQB59RXbp8NpHm1IDVYvKsM5l8k4c+gGaryfD+aLSbW8bUI911Jsji8o5x65zQByFdF4Ktzd62bfarJInz7lzwCD/SsS+tWsdQntXO5oZGjJA6kHFafhrX18P3F1MbczNNAYkIbGw5Bz+lAHoJngmv7rUDBCIbVPKiXyxgt+VeU3Tl7yZyMFpGJAHTmunHjKAWVvbfYX2RyeZLiT/WfpUR8L/brW71RbtIYd29UKEk7udv4dKAOYorY1vw++iQWzy3CySTruMYXGz8ax6ACiuoHgqQ3Zh+3JhYRK7+WcLkZx1qM+D5Bp9tc/bEzcybEj8s5x6/rQBzdFdG3hFle5/wBOQpbjlvLPzH060kPhGWW4ii+1opdDIx2H5QP/ANVAHO0Vf1HSm06OGRpBIsxbaQMcA9aoUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB9tfs+f8kJ8Pf9vP/pTLXpNebfs+f8kJ8Pf9vP8A6Uy16TQBzfxH/wCSWeK/+wLef+iHr4Ar7/8AiP8A8ks8V/8AYFvP/RD18AUAFFFFABRRRQAUUUUAe7fDqeLS/gvcSROPteo3Bt1XPIGSP6V3U1qr+JdD0UOpg0u38+c5GM4Jr5REsiqFV2AByADTvtM+4t50mTwTvNAH0wNScaN4l15ivmXszW1v83bJFeD/ABAsG03xvfWrnLKIyT7mNT/Wue8+Xbt818dcbjTWdnYs7FmPUk5oASiiigAAJ6A10Xgm9aw1qdlyGms5YQf94Yrv/B6LpvwsutQeNfNuMQRFlBJye351r3lkoi8O6Gkah2xNNhRnsetAEt3blm8OaEvIx50n6mpoLlZfFGtasf8AVWUJjQ9s4Ip9nOk3ifV9Wb/Uadb+XGewOAKyFL23gNsZFxqtx+JBIoAgffb+B2brNqdxx6kZNW7u3WTxHpemqR5dlD5j89Dgmud+K7/Y9O0vS4mwLZFLY/vEZrzHzpd2fMfPruNAF3X5BN4j1GRej3MjD/vo1n0Zz1ooAK9Ns7M/2ZpOmBhuuCJZOf4f8mvMqd5jggh2yOnNAHW+Ns3GLpTlFuGhTHoFBrkMH0ro/BkTXms/ZSdySbSwPPQ5rtZJYxPrN+ETEY+zw/KPcUAZ8MxOh3VyD+8uykSc89B/hU85AvkjGPK0+33Hn+LH/wBavM5JH8xvmI+YnGaTzH5+duevNAHpENo8sFpbMR5l9L5jc/w81KRhdVvExtjxbx4Pvj+teZeY/Hztx056UeY+Mb2wfegDrvHlsLOHSLfgFbfcfxxXH0rOz/fYt9TmkoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD7a/Z8/5IT4e/7ef/SmWvSa82/Z8/5IT4e/7ef/AEplr0mgDN8R6R/wkHhXVdG8/wCz/wBo2U1p52zf5fmIU3bcjOM5xkV8/wD/AAyN/wBTt/5Sf/t1fSVFAHzb/wAMjf8AU7f+Un/7dR/wyN/1O3/lJ/8At1fSVFAHzb/wyN/1O3/lJ/8At1H/AAyN/wBTt/5Sf/t1fSVFAHzb/wAMjf8AU7f+Un/7dR/wyN/1O3/lJ/8At1fSVFAHzb/wyN/1O3/lJ/8At1H/AAyN/wBTt/5Sf/t1fSVFAHzb/wAMjf8AU7f+Un/7dR/wyN/1O3/lJ/8At1fSVFAHzb/wyN/1O3/lJ/8At1H/AAyN/wBTt/5Sf/t1fSVFAHkUXwIEXhnS9G/4SImOxbe7/Ysecc56eZx+tXh8Gz/wkUmqtr2SYfKii+x/6vjrnfz+Ven0UAeTx/BAxeHrrTU8Q4ku5vMkn+xdR6Y8z+tTT/BVJrvTH/tzEFgBiH7H98jvnfxXqVFAHiXib9nT/hJXuHl8U+TJLMJFb+zt2xQCNv8ArR61zX/DI3/U7f8AlJ/+3V9JUUAfNv8AwyN/1O3/AJSf/t1H/DI3/U7f+Un/AO3V9JUUAfNv/DI3/U7f+Un/AO3Uf8Mjf9Tt/wCUn/7dX0lRQB4L4c/ZkHh+9kuf+Et+0M0ZRR/Zu3aT3/1prQT9ncCyit28T7gs/nSH7B/rDnOP9ZxXtVFAHzhL+yT5kzuPGu0MxOP7K6f+RqZ/wyN/1O3/AJSf/t1fSVFAHzb/AMMjf9Tt/wCUn/7dR/wyN/1O3/lJ/wDt1fSVFAHzb/wyN/1O3/lJ/wDt1H/DI3/U7f8AlJ/+3V9JUUAfNv8AwyN/1O3/AJSf/t1H/DI3/U7f+Un/AO3V9JUUAfNv/DI3/U7f+Un/AO3Uf8Mjf9Tt/wCUn/7dX0lRQB82/wDDI3/U7f8AlJ/+3Uf8Mjf9Tt/5Sf8A7dX0lRQB82/8Mjf9Tt/5Sf8A7dR/wyN/1O3/AJSf/t1fSVFAHzb/AMMjf9Tt/wCUn/7dR/wyN/1O3/lJ/wDt1fSVFAHzb/wyN/1O3/lJ/wDt1H/DI3/U7f8AlJ/+3V9JUUAfNv8AwyN/1O3/AJSf/t1H/DI3/U7f+Un/AO3V9JUUAfNv/DI3/U7f+Un/AO3Uf8Mjf9Tt/wCUn/7dX0lRQBzfw+8I/wDCCeBNP8N/bft/2Lzf9I8ryt++VpPu7mxjfjqeldJRRQB//9k=)

(a)ICA base of No.23 (b)ICA base of No.40

Figure5. A set of blocks is applied to each ICA base

グラフィカル ユーザー インターフェイス が含まれている画像

自動的に生成された説明

Figure6. A set of blocks is reconstructed by only DC component in ICA

Table1. ブロックの保存に有効なICA基底の組み合わせ

|  |  |
| --- | --- |
| Block of No.1000 | Effective ICA basis for block of No.1000 |
| (a)  座る, 小さい, タイル張り, 流し が含まれている画像  自動的に生成された説明　 　 　ツリーマップ図 が含まれている画像  自動的に生成された説明  ICA base of No.39 ICA base of No.59 |
| (b)  座る, 小さい, タイル張り, 流し が含まれている画像  自動的に生成された説明  ICA base of No.39 |
| (c)  ツリーマップ図 が含まれている画像  自動的に生成された説明  ICA base of No.59 |

＊＊ 4. Experimental results ＊＊

・画像“Airplane”に対しての条件で提案手法の式(8)を適用することで求められた最適なICA\_BlockをFig.7に示す．

・Fig.7は，提案手法と従来手法のICA\_Blockを比較しており，ICA\_Blockを原画像で，DCT\_Blockを黒で表示している．

・Fig.7(b)，(c)を見ると符号化レートによって，ICA\_Blockの領域が異なっていることが分かる．

・Fig.7(b)と(c)，(d)，(e)を見ると，提案手法のICA\_Blockは従来手法よりも多くなっていることが分かり，これは，提案手法が基底の組み合わせを考慮したためである．

・また，ICA\_Blockの候補が変わることで各ICA基底の組み合わせも変わるため，提案手法では，符号化レートごとに選択されるICA基底も異なるものになる．

・次に，画素の画像“Airplane”，“Barbara”，“Cameraman”と“Mandrill”を入力画像として，提案手法を適用したときのPSNR対エントロピー特性を求めた結果をFig.8に示す．

・Fig.8では，DCT単独と提案手法の結果を比較している．

・ICA\_Blockが増えることは，同じPSNRで保存するときにDCT単独よりも符号量を少なく保存できるブロックが増えるということであり，符号化性能の改善が期待できる．

・なお，提案手法は，ICA係数の符号量とICA\_Blockの平均値を保存するための符号量，ICA基底を保存するための符号量を合計したものになっている．

・Fig.8を見ると，提案手法の符号化性能がDCT単独よりも優れていることが分かる．

・実用的な符号化レートとされるにおいて，提案手法を用いることで，DCT単独よりも平均で0.0025[bit/pel]少なく保存できることが分かった．

・また，低符号化レートである前後において，符号量を最大で0.03[bit/pel]小さく保存できることも分かった．

・さらに，画像“Airplane”に対しての条件で提案手法を適用したときのPSNR対エントロピー特性を求めた結果をFig.9に示す．

・Fig.9を見ると，提案手法の符号化性能がDCT単独よりもわずかに優れていることが分かる．

・以上のことから，提案した重要な基底の選出法は，実用的な符号化レートにおいてDCT単独のものから符号化性能を改善できることが明らかになった．

雪の上を飛ぶ飛行機の白黒写真

中程度の精度で自動的に生成された説明  

(a) Original (b) 25[dB] ICA\_Block (c) 30[dB] ICA\_Block

** **

(d) 25[dB] Conventional (e) 30[dB] Conventional

Figure7. ICA\_Block compared with conventional method



(a)Airplane 　　　　　　　　　　　 (b)Barbara

(c) Cameraman　　　　　　　　　　　　　　　　 (d) Mandrill

Figure8. Coding performance of proposed method compared with DCT

Figure9. Coding performance at the case of low compression

＊＊ 5. Conclusion ＊＊

・本論文では，ICAとDCTを用いたハイブリッド型画像符号化方式における性能改善のための基底選出法を提案した．

・提案手法では，画像を一様に8×8の矩形ブロックに分割し，DCTを適用するブロック（DCT\_Block）とICAを適用するブロック（ICA\_Block）の2種類のブロックに分類している．

・ICAを用いた符号化では，送信側と受信側でICA基底を共有することが前提となるため，基底を保存するための符号量が必要である．

・この問題を解決するために，改善できる画質の観点から各ICA基底の組み合わせを評価し，削減できる符号量と基底を保存するための符号量を比較することで，符号化性能の改善に最も寄与する基底の組み合わせとそれを適用するICA\_Blockを決定した．

・その結果，ICA基底を保存するための符号量を加えた場合でも，実用的な符号化レートにおいてDCT単独のものから符号化性能が改善され，従来のハイブリット型符号化方式の課題を解決することができた．

・提案手法では，符号化レートによってICA\_Blockとそこで使用されるICA基底の組み合わせが異なるため，符号化レートごとの処理が必要である．

・そのために要する処理コストの削減が今後の課題である．

[1] 村田昇，入門 独立成分分析，東京電機大学出版局，(2014)．

[2] 陳延偉，独立成分分析(ICA)のパターン認識・画像処理への応用とMATLABシミュレーション，トリケップス，(2007)．

[3] 亀田昌志，川村和也，”離散コサイン変換と独立 成分分析の基底を併用した静止画像符号化方式，” 画像電子学会誌， vol.45， no.2， pp.201-211， (2016)．

[4] 富樫篤士，亀田昌志，“独立成分分析の基底を用いた静止画像符号化における画質改善量の比較に基づく重要なICA基底の選出，”信学技報，vol.118，no.501，pp.153-158，(2019)．

[5] J.kauhunen，E.Oja，L.Wang，R.Vigario and J.Joutsensalo，”A class of neural networks for independent component analysis，” IEEE Transactions. on Neural Networks， vol. 8，no. 3，pp. 486-504，(1997)．

[6] A.Bell，T.Sejnowski，”An Information-Maximization Approach to Blind Separation and Blind Deconvolution，” Neural Computation，Vol.7，pp.1129-1159，(1995)．

[7] D.L.Donoho，”Compressed sensing，” IEEE Transactions. on Information Theory，Vol.52，no.4，pp.1289-1306，(2006)．

[8] S.Mallat，A.Zhang，”Matching Pursuits with Time-Frequency Dictionaries，” IEEE Trans. on Signal Processing，Vol.41，No.12，pp.3397-3415，(1993)．