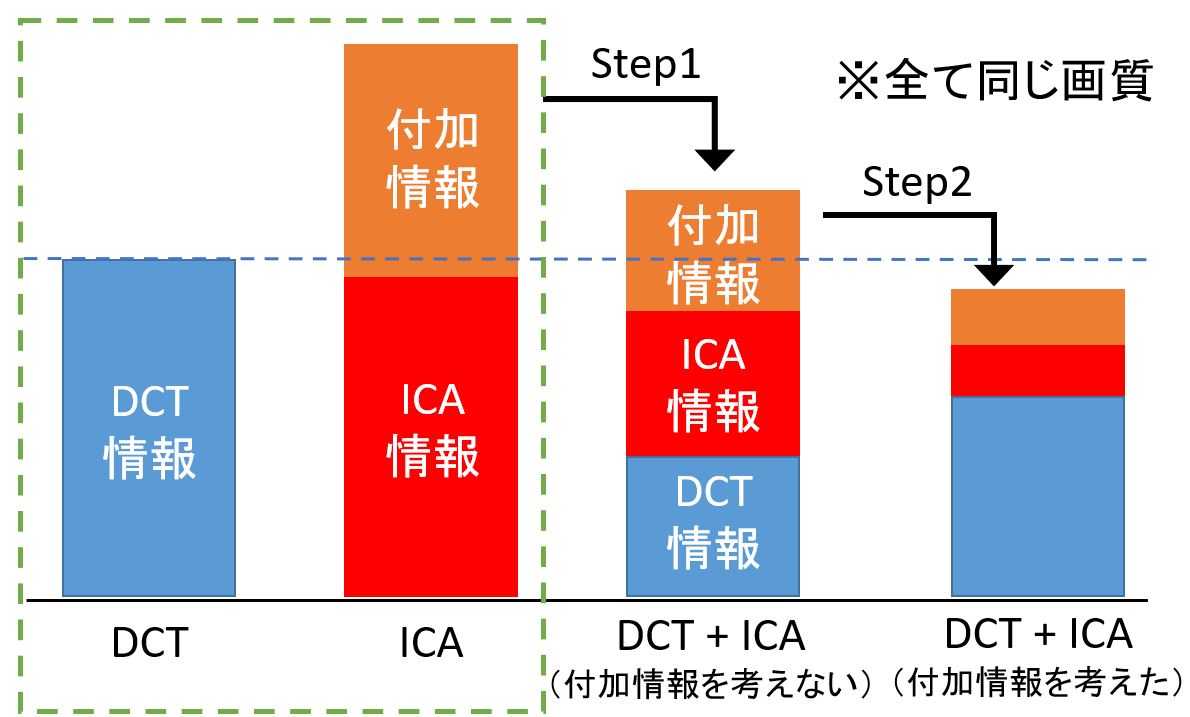
進捗報告

亀田ゼミ

M1　中田 雄大

* 前回までの進捗

　Step1で分割された，画像中のICAの方が得意な領域[[1]](#footnote-2)（ICA領域[[2]](#footnote-3)）に対して，Step2の処理を実験している．



実験中

ICA領域

で選出

図1　符号化した際の情報量のイメージ

　前回の進捗では，各符号化レート[[3]](#footnote-4)に対してICA基底を3つまで選出できることを想定し，画質と情報量がともに改善可能な領域を総当たりで探索を行い，どのICA基底の組み合わせが性能改善にどれくらい寄与できるかの比較を行った．その結果，これまでの手法よりも符号化性能が改善した．

* 質問・コメント
* 別の指標を用いてStep1を行ったらどうなるのか？
* 今回の進捗

これまでの実験では，画質と情報量がともに改善する領域を対象としてたが，今回の実験では，画質または情報量が改悪する領域も対象として比較を行い，性能改善に有効なのかの確認を行った．

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 進捗内容 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1. 性能改善に有効な領域を拡大
2. ICA領域のみで基底を作成

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

* 1. 性能改善に有効な領域を拡大

![グラフ, 散布図

自動的に生成された説明](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDiRXhpZgAATU0AKgAAAAgABAE7AAIAAAANAAAISodpAAQAAAABAAAIWJydAAEAAAAKAAAQ0OocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAOS4reeUsOmbhOWkpwAAAAWQAwACAAAAFAAAEKaQBAACAAAAFAAAELqSkQACAAAAAzcxAACSkgACAAAAAzcxAADqHAAHAAAIDAAACJoAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIxOjA5OjEzIDE3OjM2OjM0ADIwMjE6MDk6MTMgMTc6MzY6MzQAAAAtTjB1xJYnWQAA/+ELH2h0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8APD94cGFja2V0IGJlZ2luPSfvu78nIGlkPSdXNU0wTXBDZWhpSHpyZVN6TlRjemtjOWQnPz4NCjx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iPjxyZGY6UkRGIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iLz48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMjEtMDktMTNUMTc6MzY6MzQuNzExPC94bXA6Q3JlYXRlRGF0ZT48L3JkZjpEZXNjcmlwdGlvbj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOmRjPSJodHRwOi8vcHVybC5vcmcvZGMvZWxlbWVudHMvMS4xLyI+PGRjOmNyZWF0b3I+PHJkZjpTZXEgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOmxpPuS4reeUsOmbhOWkpzwvcmRmOmxpPjwvcmRmOlNlcT4NCgkJCTwvZGM6Y3JlYXRvcj48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAcFBQYFBAcGBQYIBwcIChELCgkJChUPEAwRGBUaGRgVGBcbHichGx0lHRcYIi4iJSgpKywrGiAvMy8qMicqKyr/2wBDAQcICAoJChQLCxQqHBgcKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKir/wAARCAJWA8oDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6RooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiioJr60t7mG3uLqGKe4JWGJ5ArSEDJCg8ngE8UAT0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRTS6q6oWUM2dqk8nHWmi5ga6e1WaM3CIsjRBxvVWJAYjqASrAH2PpQBJRTDLGJliMiiRlLKhb5iBjJA9OR+dPyN2M8nnFABRUdvcwXcCzWs0c8TZ2yRuGU4ODgj3FLFNHPGJIJFkQkgMjAg4ODyPegB9FFFABRRRQAUUUUAFFFRW11b3tslxZzx3EEgyksThlYeoI4NAEtFRQ3VvcSTJbzxSvA/lyqjhjG2AdrAdDgg4PqKloAKKKKACiiigAooooAKKhhu7a4nngguIpZbZgk8aOC0TFQwDAdCVIOD2INE95bWskEdzcRQvcSeVCsjhTK+C21QepwrHA7AntQBNRRUT3VvFcxW8s8aTzBjFEzgNJt+9tHU4yM46ZoAloqN7mCO5jt5Jo1nlDNHEzgM4XG4gdTjIz6ZFSUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBwXivTp/EHxM0XRjrGqafZDSru7lTTb6S2aRllgRSShGcbz1963/AA94Tg8OzzSwatrV+ZlCldS1KW5VcHOVDk4PuKr694C0nxL4it9U1dp5Uhs3tGtFkKRzIzq3z7cFhlR8ucHjIOKwND0+Dwb8XF8O6ArwaNqWkPeGxDs0dtNFKqb0BJ2hg+CBgEgGgBmm2N58RdU1vUbzXtW07TbLUJdP0630q8a2BEJ2vK5Xlyz7sA8AKOOak0fxteaV8OfEt5r0i3uo+FZrm0mlKhPtRjUNE5A6F1ZM475q18JAYvCeoWjszTWut6hFLu67vtDnn8GB/GuG1u2lvPhx8YZLctsbVZiHXv5UcJcfT5SD+NAHQah4c8R6R4Gl8WL4o1abxJa2n9oT273JaylKr5jwCD7oUjKgjDDg5612lx4msn8MWWpA6kkWp26yQS6fp8t3JGHQMGxHG4GAerDH1pvjG8gb4aa7ebwIG0m4kDn+6YWOazfDNn4gj+GXhOz0iazspU0q1juZbuJpWjxCgwqAqCevU4HoaAPPta8VxWPh2dvEmveMbW6GorDbyz2V1ZpdQeapLKY4I9pMRbK5BBU4421v6Pq3hux8WQXmg6DqiaYbIySai3h2+nmvJWYeWBK0TPtVQxJJwd64zg1lrHr154EtPEl9o9lfTaollOt9c667XCLJNE6IqCz8uNdxTcqccfxEZrcntPFOj+ItMTT7fTfD6avdyQFLXUZL22MvkSz7mt3gixnyiCY5EOWyQ1AHT+IfGlro+gw3lvHI91eIxtLe6je3wFGWkl3gGKNB8zswG0e5API6HqOmWMradp/iGPxRZ6swfVJNI1AvcWl1I2GnUQtvSF2Kr8pGw4PQsR3ssXiObRbdYb3S7PVA2Z5HtJLiArzwq+ZGwP3TksccjBzkcn4b8UeKr2Hwrf6rdaPLaa9dSW8lvbadLFJFi3nlBEjTsDzABjb0agDn9Kin128tNZ0zw947l8PXOnh4FHicq80jsCHIa/BUBAABnne2RwK7rw9rnh+x8D2ustfT6bpl1+8Emuai0joxONrSSyPjkdAxHpXn3w/8H/bPh3oNx/wrnwTf+bYRN9qvLjE02VHzOPsbYY9/mP1Nd58K12fC3Ql2Km23xsTovzHgdOKAMTwD4om1HwbaW/ha40XW76KW4e6huNXMbwoZ32MQkcpwQe4HGMZpviefxfL4q8Hvc6BoisupTCJU1mZldjZ3HDMbUFRtDEEBuVAwM5GfpsVtrfw20rTIrCHXprXUnurrSVeBnaEXUoyUlZVxn+8RnHHSqs1ong6z1PxHJ4cfQtPs/ENrfW+mwrB5ixtbJasRHA7KCWeQ4Byc59aAPSvClvqVnpDW+qRQx+XK4hWLUXvdqZ+6ZHijPynKgEMQAOapSeI9S1fU7mx8I2lvLFZymG61K9ZhAkg+9HGq8ysp4blQDxkkECz4T0e50bwfBbTCNdSmWS6um6g3MrGSQ57je5GfQCuF0rxRb2PwY0jRtCuI38TX1uNOjtA482O+bInkkUcgI/mOxPp70AbfhrXvG+reFINf2aLqSTGRksYIJbR3jWRlVlkaSQEsqhgCAOcbu9ddoWt2niLRbfU9PL+TMDlJF2vG4JVkcdmVgVI9QabptlY+F/DFrZLKkFjplosXmSMFCxxqBuYnpwMk1z/ww33Hhy/1TY0dtq2rXd/aK64PkSSHY2O24Df/AMCoA5P4a+FH8V+A7LW9W8UeKjeXE9yH8rXJ0QbLiRFwu7A4UVv6XqGseEPHdj4X1zU5dY0zWIpX0u+ugv2iKWIBnhkKgBwVO5W4PBHNHwQ/5JDpX/Xe8/8ASuajxq4uvip4AsIMvPHc3V5Io/giWAqWPplnUD1NADtYvtU8WePbjwpo2pT6Vp2kwRzateWuBPI8oJjgjYg7PlG5mHPIAx1qO80TXfBN9p+o+HdT1rXNPe5jt9R0y/na8fy3bb50Tt86lCckZ2lc9MZp3g0/ZPix4+sZ/lnmms72In/lpE0ATI9gyMK7LVtYsNC083urXK21uJEj3sCfmdgijAyeWYCgDnvEfgmDU7i91Q674itJWj3CGy1iaCFSqYG1FYAdMnHUknvXMfDHwmda8DeH/EGpeJfFE97PClxKra3OY3YHOChbBHHI716bqP8AyC7r/ri//oJrkvg7/wAkc8M/9eK/zNAE3j6WC1fw7ci2vp9RXVkSxFgIvMZvLkaRD5jouxokkU/N1IOMis66164/4TzTbo+DvEcWpf2fcqsCy2G24hEkO4sftOPkZkxyD+8OOM1e+I2jXmr2+gNZaffagllqy3NzFp94LacR/Z5kykhkjwdzr0cHBPvXG3enY8faUn/CLeOBnTL0+U3iXMrYltfmV/t/yqM4ZdwyWQ4bblQDr/D8733xE1C71jStQsdQNkgs0vFt9sNsG+ZVMU0mWaTliduQEGPlrK+KVxeOyTaBBeW97o8Tz3uqxLsW2s2X98illIkdlG4KM7WRWJGADo+EtHubbxhcX/8AY2uabamwEOdZ1UXjO/mbvl/0iYqMfQVZ8XNd+JJpvCWmxTpDLBv1O7wUVYWBxCjd3kxtOPuruOQStAEv9t2nhq5s/C/h7w7qGorb2CTRpYNbqkcO4ouTLKmSSp6Z9a5fwV4ym0L4e2k194W1lbJbmVXu0e0KKXunUfL5+/hmAOF9cZHNP8NN4luLnw/ruj6VaXkd14Us1lkvb57dQ5JcgMsUm4/N6CsjTk8V6l8I7fT4dG0t4Jr04ePVJDOdt6XbbEYADja38Y4GfagD1HXtdbQ4oGTSNT1Rp3KBNOgEhUgE5bLAKDjGScZ471gah4016x017+fwmunWyY+fVtTjiJyQANsKzEsc8KASTgAZrta4/Vdl78WtDsb5gbe1064vraFvuvcB449/uUR2x6byaAM2HxJ46WzGr69ZaF4f0iOSMym4M883llgCxChRGME8t93qwGDXdXuoWmnabPqF9cRwWlvEZZZnb5VQDJbPpis/XfD6azLZ3MU5tb2zkzHOF3Bo2I82J1yAyOowQeh2t1UVgeO7Ky0XwHp9rHH5OiWF/Yi6jyWWO1SdM5zk7BgE5/hBoAqeIPF/iuHw1JrmladY6ZatJDFaRapHJLcXBlkWNC0SMnlZLjgszY6gHita917W/CyxXPilLG80pnWOfULCJ4TaliAHeJ2f93k8sHO3qRjJFHVdRtvGHjnSNE0m4jurLSZl1TUpoXDIrKD9niyONxc+ZjsIx6irXxTvobb4b6vZMBLd6tbPp1lbj7888ylEVR3ILZ9gCe1AGr4rTV7rSRp2goyTX7/Z5b0Oo+xREHdKAeWYDhQAfmIJ4BrkdK0XWdJur/SdC8UarfadolpDHa2kA09WEqrn7NJmAEZXyyGyOGOTkZPW6jNq+l6BZ2ekWv27UpFS2WWQ4hibbzLIeu0YJwOScDjOa4fw5Fd2Pwwt9ZuvEms2mya4k1CXTra1czMblw9w4liduByQp4VeBxQBYj8MeIPD39mySeNLu1k1fUWbVY41s1Xz5UJHkmWBmOGVUCkklemMYr0DS7G40+z8m71S71STcW8+7WJXx/dxEiLj8M89a4fxJoGotDokqeN9auo5tTt/LcxWJAznDqVthn2zkexrrl0Ey6M+napq+qagHfcbk3AtZh0IUPbLFgcduuTnIoA4Zvsn/CUeI/8AhKf+Ey3f2iPsP9n/ANreR9n8iHGz7N+7x5nme+c1HqH9keTB/wAI5/wnX9o/a7fy/tH9teXt85N+7zf3e3Zuzu4xUepaS58bLa6JY+MdR0vTo2W/a08Rzr5lwwUpHme7ThVJYlc8so9RUuoLZaTZm71Pwx4+trYSJG0reKGYKXcIvC6gSfmYDgHrQB6lXGQ31v4r+JjwW8we08KrmUA8SXkoZR9RGgcH/ak9VrYbw2bTQbvTtD1S/spbk8XdzdS3skXQEoZnbB2g47AnOD0OJ4N0y10Xxp4i0zTo/LtbW1sUjUnJ5ErEk9SxYkknkkk0AReEtYsNA8H67qWqzrb20OvaoXcjJJ+2SgKAOWYnAAHJJAFdJpusXU3hptW1nTW0pgkkxtpZQzpGMlS+BhWKgErztORk4rkvh94btLm41TWb+Sa8mg1/U/scMzAxWh+1ygsiAY3nn5zlhnAIHFd1qFja6tpt3p16vm29zE0M8YcqSjDBGQcjINAHnHh/xpZab4m8R3+pxm0tNRuorgySOB5JXSrebYR3OxZD/wAA96zJtY8QRWvgttY8L6694+vyXbGW5tG8wyQXTCKPM+VCq+AGCAKmODgHqdJ0m01XxJ45tbu1juI01a0kSF3KIXSytmUEjtkDIwRjggjis7xfeeL21fwibnQ9EjZdcBhEeszOHf7JccMTajaMbjkbuQBjnIAO40vVr3UfO+1eHtR0oxqCn22S2YSnngeVK+Pxx1715xd+LJB4yvLvWb3wpplylt9iht7/AMSpHPYo2Gk+VEJ3swXPzDARMd69L0mbWJoZDrtjY2cgb92tnevchh6ktFHg+2D9a88j17VdM8UeJoNPvvs8X9qFtn/CKX+o8mCHJ82B1T/gOMj8aAIYJvEV74k8GY1XS5rz+z9SiXVlH2iC6j3Wu2RQrLliB0zjKsenFdnpotND8TJp11qt/qmsanA8zvPKCqRxEdI1wka5kAGFyc8knmuJsbmym8O+DrTXdJGt2l1bXkj2n9k+eZJVkTa2x1Jjxub7xAGcE5xXa+EtJXT5riW18I6X4atJVXZHbCNbhz38wRrsH0DN0oA6eiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5nxH4UvNT1i21rQdbl0bVbeFrcyeSJ4Zoic7ZIiRnB5BBBFHhvwjLpOr3et63qsms61dxLA100IhSKFSSI44wTtXJyeSSec101FAHG33gnVINdv8AUvCHiQ6GNUdZL6B7FblHlChfNQMw2OVAB6g4BIrW0Lwlp2heFP7AQPd20iyC5e5O57lpCTIznuWLHP1rcooA88Pwx1GbS4vD194tuLjwtEVRdO+yIszwqcrC9xnLJwAcKCQMZr0JVCqFUAADAAHSlooA8XsvhfqEngXS9Nn+H3guG/ht7UT3c11md2j2F9+20Ybm2sGw7D5jyw679l4LurTxf4ev7bwN4X0SKzvZJLi70e4DShDazxhSDbxZUu6dCTnHGMkek0UAFedab4R1fRNE8PTrHdajqWlBlh00XkUVnFKyyoZ3YoX+5Ky/Lu6j5c816LRQB59b/CXRj4euIbvSvDy6tPIZVuYdCtvKtzkERqhT5k4wdx3HLHI4xuafocl/4XXR9Z0+PR4reQIsOi3bwRSIvIKGPayIcnKfUcjk9LRQBzEvgbS4bVLfSWu9Ks0RvMstKmFqLljzud1w+7rzuHXmuWh+GD+I4LhvENtFolnIrG20yxlLyLMVKrc3E3/LWVeqjJVT3Y816hRQBzPhI+KJ7i8uPFkCWjLFDbRwxSq8crpvMlwuPuhy6/KeQEHA77EGi6VbapNqVtplnDf3AxNdR26rLIPRnAyfxNXqKAOd1bwTp2v6p9q124vdQtVIZNMmmxaKQByY1A39M/OWGTXQqoVQqgAAYAA6UtFAHnHh/wCH3jDwxo0Wk6P45s47GGSR40fQg7rvkaQjcZueXPauk8M+DbfQL671S7vbnV9avgFudRu9u8oOkaKoCogPO1R165ro6KAOa8TeDk1zUrPWNN1GfR9csUaOC/gUPujblopEbh0J5weh5BFULfwNqd/q1le+NfEh1xNPlE9rZwWS2sCyjpI6hmLsvbJwDziu0ooAjuIvtFrLDnb5iFc4zjIxWT4O8O/8Il4N0zQftX2v7BAIfP8AL2eZjvtycfma2qKAMO/8EeFNUvpL3U/DGjXl1KQZJ7jT4pHc4xyxUk8ACucvfhl4cPjjSLi28G6H/ZSWV3HdgafAF8xngMRKY5OFlwcHALdN3Pf0UAc4vw78FI4dPB+gKynIYaZCCD/3zU3ifUNZtbT7PoOgzapNcxOolW4iijgbGFL72DYyc/KGPB46Z3aKAOP0+18WaHplloejaXo7WOm2kNrDd3Woyh5QkSrnylhOOQRy/OKxT4C8Vp4Oj0tNc01JLGZryz8iwfzBcCRpU/eNLgLubaQFGVLDPNelUUARWsk0tnDJdQ+RO8atJFuDbGI5XI4ODxmsvxH4XsPE0NuLx7i2urOTzbS9tJfLntnxglG9xwQQQR1BrZooAw/D+k67pk0w1nxGdZtyoEIlskhlQ55LOhAbjA+6K2pYo5oXimRZI3Uq6OMhgeoI7inUUAU9P0jT9HsjaaPY22nQZJEdpCsSgnvtAxn8KydJ8E6ZpmrDVrma81bVQpVL7UpvNkjB6hAAEjz32KM10VFABXPeCNKutJ8G29hqkAinWScvGWVuGmdhyCRyrD866GigDi7yxvxqOkaDpHhma00fS7yGVL77RCIBEik7VTeZM5O3BUdDzjGe0oooAK47UNJ8VeIb+1tNZh0e00e3v4rt2tbqWWa4EL+ZGhRo1VcuqE/M3QjnrXY0UAFc/pOmXlt458Q6hPDttbyK0WCTcDvKK4bgHIxuHWugooA4my0rxj4ckv7bQrbQ7+yudQuL2OS8vZoJE86QyFSFicHDMwByOMcVqeGtF1K01PVdZ1+W1bUNSMSGKz3GKCKJSEQMwBY5d2JwPvdOK6KigDkrHT9d0zXPFl9Y6faztqGoQS2q3V4YUkjW1hjZtyJIQQyMMFecenNUdbsfG+s3ui3H9jeH4f7K1D7bt/tudvN/cyxbf+PQY/1uc8/dxjnI7uigDH0u58STXhXWtJ0q0ttpIktNUkuH3dhta3jGOvO78Kq2unazpUOuT2EVjc3d7qBubeKa4eOPYUjTDuEYqfkJ4Ujpz3HRUUAcPb+GPEOlWPh2fTm0y61DTIp47mCeWSKKUTFWbZIEYrhlGMqcj0rWsbfxRea9b3mt/YNOs7aOQCzsLuS48922gM7NHGMLhsDaeT1456KigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAoooJx1oAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK85+KfiO5shZ6ZpjSJLvW4lkQH5cN8g/76GfwHrXo1ZXiL/kFw/wDX/Z/+lMddGGmoVU2rmVWLlBpOxJoGrLrmhWuoKuxpU/eIRjY44Yfnn8MVo0UVhJpttGiulqFFFFIYUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFRWzyyREzx+W3mOAM5yoYhT+IAP41LVXTvL+yv5JkK+fNnzOu7zG3fhnOPbFTf3kire63/XUtUUUVRIUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFZXiL/kFw/9f9n/AOlMdatZXiL/AJBcP/X/AGf/AKUx1pT+NepM/hZq0UUVmUFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVT1HVrHSYfN1C5SBT0B5J+gHJqLXtXj0PR5byQBmX5Y0J++x6D+v4V89aj4w1nXdQub200mTUIVkZDPJcCLeVOCI1IOQDkc4HpXJiMR7LSKuzGpU5dFue0v8R9FSQqI7txn7yxrj9WzWvpXibSdYYJZ3S+bj/VSDa369fwzXgltrtlc6B/bG9o7VY2d/MGGTbncCPUEEYrPj8U31sLe+vtHkstPkdNlz9oDPFuPys6AfKMkdzjNcEMZX5tUvyOeNepfVH1DRXLeCPEr61Zva3jZu7cDLd5F9fqOh/Cupr1qdSNSClE7IyUldBRRRWhQUUUUAFFFFABUFmztAxkmWY+bIAy9AA7AL9QMA+4qeq9kpW3YNCID50p2g9Rvb5vx+9+NT9pFfZf9dyxRRRVEhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVleIv+QXD/ANf9n/6Ux1q1leIv+QXD/wBf9n/6Ux1pT+NepM/hZq0UUVmUFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBwnxPldbXToQfkd5GYe4C4/ma8k1m71m3GNH02K6BTJkefaVPoEx83/fQr3Dx3pD6p4fMluu6a1bzAAMllx8wH8/wrwVfEN7Z74NV0W+a5VmCtZW5lilGflIbPy8Y4bHNeHi4S9u5WucFaL9pcx76G2h+GCwWUzXMU08azSlNpLNcDzMqenJIx2re8YqG8F6sGGR9lc/kKzofDt3c+Cb+yutsF7fzS3YTduWGRn3qufYgZx70zUr+/8Q6OdGj0m+tLq6CxXUksW2KFcjeQ/RuM4xnOax3kmns2/wAjPd/M9L+GVxL/AG9pp3Eme3IkPr+73fzAr2OvN/hpohFw+pNHtghTyYcjqe5H0HH416RXqYGLVK76s68OmoBRRRXcdAUUUUAFFFFABVXTjGbV/JaRl8+bJk67vMbP4Zzj2xVqoLNnaBjJMsx82QBk6AB2AX6gYB9xUv4l/XYtfC/67k9FFFUQFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFc54w8ZWfhOxDSL9ovJgfItlbBb3J7L7/lXR182+JdYk1/xNe6jI+5JJCsP+zEpwg/Ln6k13YLDKvUtLZHPiKvso6bs0NU8f+JtVlZn1OS0jJysVn+6C/wDAh8x/E1Vs/GHiSxlElvrt8x9J5TMD+D5rFor6NYeily8qPJ9rUbvc9o8EfElNeuF03WY47a/biKROI5/bn7re3ft6V31fLQZkZXjYo6kMjqcFWHII9wa+j/C2rnXfC2n6k+PMnhHm4GBvHytj23A14OPwsaLUobM9LDVnUXLLdGtRRRXmHYFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFZXiL/AJBcP/X/AGf/AKUx1q1leIv+QXD/ANf9n/6Ux1pT+NepM/hZq0UUVmUFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVxniH4fw6hM91pUiW0zHLROP3bH1GOldnRWVSlCrHlmiJQjNWZ5E/gLxAshVbNHGfvLMmP1Oa2NI+G07SrJrM6pGMEwwnLH2J6D8M16LRXLHAUYu+rMlh4J3I7e3itLdILaNY4oxtVFHAFSUUV37HQFFFFABRRRQAUUUUAFV7JStuwaAQHzpTtB6/vG+b8fvfjViqunGM2r+SzsvnzZL9c+Y2R9Acge2Kh/Ev67Fr4H8v1LVFFFWQFFFFABRRRQAUUUUAFFFFABRUF5e29hbNcXkywxL1ZjXI3nxMsYpCtlZTXABxudhGD9OtY1K1Ol8bsRKcY7s7WiuKs/iZYyyBb2ymtwTjcjCQD69DXXWd5b39stxZzLNE3RlNOnWp1fgdwjOMtmT0UUVqWFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFISFUliAAMkntQAtQ3d5b2Fq1xeTJDCnV3OB9Pr7VnNrEt+xj0GFbgdDeSZECfQ9XPsvHuKltNGjiuFvL6Vr69UYE8owE9kUcKPpz6k1pyqPxE81/hIfP1LVuLRG020P8Ay3lT984/2UPC/Vuf9mvnW4tXsbyezmGJLaVoXHoVJB/lX1FXlvxL8CXFxdSa/osLTMyj7XbRjLHAxvUdzgcjrxn1r0cvxEadRxlomcmKpOUbrVo8rooBB6duD7UZx1r6M8oCcda+gPh1aSWXw90qOYYZ42mA9pHZx+jCvKvBHgi58U3qXF1G8WkxtmSUjHn4/gT1z3PQc9696VVRAiKFVRgADAArwczrxlanHpuelg6bV5sWiiivFPQCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/wAguH/r/s//AEpjrVrK8Rf8guH/AK/7P/0pjrSn8a9SZ/CzVooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqCzZ2gYyzJM3myAMnQAOwC/UDAPuDU9V7JStuwMHkfvpTtznP7xvm/4F978an7SK+y/wCu5YoooqiQooooAKKKKACiiigAoJwMmiqWss66DftH98W0hXHrtNKTsrieiueOePPFt9qWoD7BaS3kXmGO2iVgiKP77k9AcehPbFc34b1K41bQYru9WJZ2klRxECF+SRk4ySei1qVg+C/+RWi/6+Ln/wBHyV8xKbqRcpb3X6nlt8ybe4t1qmp3msXGn6Ctqv2NVNxcXasyhmGQiqpGTjknPGRXTfDrxrdWWozRX6CFoJ/s99AjFk6ArIvsQQR36iuV8LZN74haTHmf2q46/wAIjj2/pSaOT/wnfiQdtlofx2N/gK0T5G3HeKT/AC/zKT5Xp0PqIHIyKKpaKzPoOntJy5toyxPrtFXa+ji7q56Sd1cKKKKYwooooAKKKKACiiigAooooAKKq32pWunIpupdrOcRxqCzyH0VRyT9KoiPU9WANwX0u0JOYY2BmkH+0w4T6Lk+4q1BtXeiJcuiJ7zWYoLg2tpG97eY/wBRDj5fd26IPr+ANQjSJ9QYSa9MsqY4soSRAP8AezzIfrx7VoWdlbafbiCyhWGMfwqOp9Se59zU9PmUfhDlvuIqqihUUKqjAAGABS0UVmUFc34k8YLoupWmj6Zp02sa3eIZIrGB1TZEDgyyO3CIDxnkk8AGukrgfBoF38VvH17OM3EM9pZx5/giWAOAPQFnY+/4UAZ97cWF3rVpb/EfwPDo8moyiG31G3uxPFJMfuxvKgR1Y9sjB6ZzVrW9D8L+E7mxt9J8JnWdW1B2W0tGlLr8oyzu8pKoqjHPJ54BrR+L1tFdfCHxGJcgw2TTxspwVkjw6MD2IZQa34b2/k8KQ31tbJd372iypA0nlLJIUB2lsHaCe+DitFVqJWUnYnki3exjaH4wvJPEUXh7xNoJ0PUZ7dp7QR3S3EFwiEBgrgKQy7gSpUcHNGseMb+PxFNoXhTQv7bv7SFJr0yXgtobYPnYpcqxLsATtA6DOaw9Lk1HVfirp9144tI9Hv7SzuBo1hC/nRzB9nnSefwGYAKNm1SASeRzV/4cEz6347u5kKzN4jkhJPdI4IQn6H9azKN7wr4ni8T6fcSG0lsL2yuGtb2ynIL28q4JGRwwIIIYcEEGtyuC8JsV+MvxBhXiPZpkuB/eaFwT+SL+Vd7QAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVleIv8AkFw/9f8AZ/8ApTHWrWV4i/5BcP8A1/2f/pTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABVXTjGbV/Jd3Xz5sl+ufMbI+gOQPbFWqgs2doGMsqSt5sgDJ0A3thfqBgH3BqX8S/rsWvhf9dyeiiiqICiiigAooooAKKKKACkZQ6FXGVYYIPcUtFAHhHjLT9Q8MXzw22nS34aT90EkRMxnPzZYgcYAI9a5Hwl/a1lZR6fqOjS2yq80hnNxEy/NIzgYVif4sfhX0vquj2WtWf2e/i3r1VhwyH1BriLz4ZXIkJ0+/idCeBOpUj8RnP6V4tbCThdU43T+84Z0ZLSKujyOa31LR9cvLzTLH+0La/wBryQrMsbRSKNu4bsAggDvnIrd8AeFL/UtYuJL5FS5v5xNc+WdywRKAqrnuQB+JNd/Z/DK5MgOoX8SIDyIFLE/icY/Wu30nR7LRbT7PYRbF6sx5Zz6k06OFqTf7xWX4scKMn8SsXVVUQKgAVRgAdhS0UV7J2hRRRQAUUUUAFFFFABRRWVNrXnTPb6LD9unRtsj7tsUR/wBp+59lyfXFVGLlsJtLc0Z54raFprmVIokGWd2CgD3JrL+332qEDSYvs9tn5ry5Q5Yf9M06n6tgexqSDRfMmW51eb7fcKdyBl2xRH/YTkZ9zk+9alVeMdtWLV+RRsNItrBmlXfPcv8AfuZzukb2z2HsMD2q9RRUNtu7GklsFFFFIYUUUUAFcDq9lqnhHx/deKtI02fVdM1eCKHVbS0UNPFJFkRzopI3jadrKOeARnt31FAHlmr61N8XLFvDfh/TdRtNIe6EWs6hew/Z/LSNgZLdFJ3GQkBTwAoJz6V2HiTWdY8P3dhPp+iSapo+GS9SyTdcwHjYyJkb16ggc9CPSqs/w+tv+EhudW0vXNa0hrydbi7tbC4RYLiQAAsysjYJCgEqRnHrzXW0AeeRzX3jnx94f1O20fUtL0rQTPPJPqdu1tJcSyRGNURG+baAzEkgA8ClM154C8a67dSaNqWpaPrskd5FJpdq1w8FwEEciOi/NhgqsGxjqDXoVFAHG+AtM1A3+v8AifWrKSwu9dukaO0lIMkNvEgSIPgkBj8zEZ43V2VFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWV4i/5BcP/X/Z/wDpTHWrWV4i/wCQXD/1/wBn/wClMdaU/jXqTP4WatFFFZlBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFV7FdtuwMHkfvpTtznP7xvm/4F978asVV04xm1fynd18+bJfrnzGyPoDkD2AqH8S/rsWvgfy/UtUUUVZAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRVe9v7XTrcz3sywx5wC3UnsAOpPsOaaTbsg2LFUb7V7eykEID3N033baAbpD7kfwj3OB71V3apq2RGH0uzP8AGwBuJB7DkJ+OT7Cr9lp1rp8ZW1iCljl3J3PIfVmPLH3NXyxj8RN29ih/Z17qh3azKIrcniyt3OCP+mj8FvoMD1zWrDDHbwrFBGsUaDCoi4Cj2FPoqZSb0GkkFFFFSMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/wAguH/r/s//AEpjrVrK8Rf8guH/AK/7P/0pjrSn8a9SZ/CzVooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqCzZ2gYyyxyt5sgDRngDe2B9QMA+4NT1XsV227DyPI/fSnbnOf3jfN/wAC+9+NT9pFfZf9dyxRRRVEhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUjuscbPIwRFGWZjgAetZ11rKLcNaafE19eL96OI4WP/ffov05PoDUaaNJessuvTLdEdLVBi3U/7p++fdvwArRQtrLQnm7DTqtzqRKaFEGjPW+mBEQ/3B1kP0wPerFlo8NtcG7nd7u9YYNxNyQPRR0Uew/HNaAGBgcCik56WjoHL1YUUUVBQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVleIv8AkFw/9f8AZ/8ApTHWrWV4i/5BcP8A1/2f/pTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABVXTyhtX8p3kXz5sl+oPmNkfQHIHsBVqoLMuYG82SORvNkAaM8Ab2wPqBgH3BqX8S/rsWvhf9dyeiiiqICiiigAooooAKKKKACiiigAooooAKKiubqCzt2nu5khiX7zu2AKzBd6jqwH9nRtY2pODc3CfvGHqiHp9W/75NVGLevQTkkXL7VLXT9izuWmk/wBXBGu6ST/dUcn69B3qn9l1HVub92sLQjBtYX/eP/vyD7v0X/vqrlhpVrp25oVZ5pP9ZPK26ST6sf5dB2q5Vcyj8P3is3uQ2tpb2NslvaQpDEgwqIMAVNRRWd76soKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArK8Rf8AILh/6/7P/wBKY61ayvEX/ILh/wCv+z/9KY60p/GvUmfws1aKKKzKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKr2I227DyPI/fSnYTnP7xvm/4F978asVV08obZ/LkeQefMCX6g+Y2R9AcgewFQ/iX9di18D+X6lqiiirICiiigAooooAKKKKACiis+81iC2m+zQI95ecf6PAAWXPdj0Qe5I/GmouTshNpbmhWS+sveSmHQoReMGKvcMdsMX/Av4j7Ln3Ipv8AZVzqfza7KrRZyLGAkRD/AH24L/ovtWuiLHGqRqERRhVUYAHpV+7Hzf4C1fkZtroqLOt1qUzX92vKvIMJF/uJ0X68n3rTooqZSctxpJbBRRRUjCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/yC4f+v+z/APSmOtWsrxF/yC4f+v8As/8A0pjrSn8a9SZ/CzVooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqCzLmBvNeORvNkwY+gG9sD6gYB9wanqtYjbbsBAYP30p2E5z+8b5v+Bfe/Gp+0il8L/ruWaKKKokKKKKACiimSyxwQtLPIscaDLO7YCj1JNAD6rX2o2umwiS8lEYZtqKASzt6Ko5J9hVA6jeaplNFiEUB/5frhTtPuicF/qcD61asdIt7OZrli9xeOMPczHc7D0HZR7AAVpyqPxfcTdvYq7dU1Y/OX0uzJ+6pBuJB7nkRj6ZPuK0LKwtdPh8qzhWJSdzEclz6sTyT7mrFFJybVlsCjbUKKKKgoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArK8Rf8AILh/6/7P/wBKY61ayvEX/ILh/wCv+z/9KY60p/GvUmfws1aKKKzKCiiigAooooAKKKKACiiuK8cJrNncaddaX4n1KwS91K2s3toYbVo0R22sVMkLNu78sRnt2oA7WivLNUt75fiNLpd3/wAJX4jit9FtpQbDVUsWV3uLnLusc1uhJCqoIU8IM+pIRc6f4/8ACccGl+K9JiuryeOf+1dcN3DOotJmCbBdS8hlDZKj7vWgD1CaaK2t5J7iRIoYlLySSMFVFAySSegA70QzR3EEc1vIksUih0kRgyspGQQR1BFcx4u1aW0eXS7q3RrHU9NukimxkidI2YxsOmGj3Ef9c2z1FN0/xr4V0jR9PsdV8S6PY3cVnB5lvc38UciZjUjKswIyCD9DQB09tcwXlulxZzxzwyDKSROGVh7EcGpa8h8O+JfDcPhHwtPp/jvRtOvtPjUXFpcarGIponI81JI93Dd1bGQwA6EivTr3XtMsPD765PeRHTVhE4uI23rIhGVK4zu3ZGMZzkY60AaFFef694n8ZQadZ31jYabpSX1/b2ltbahHJcTsJZFXc6o6CMqCzFctwuCR21pvEGseHLu1TxXFZz6fdSpbjVLFWiWGVztQSxOzFVZiFDB2wSAQM5oA6qis/VptYhhjOhWNjeSFv3i3l69sFHqCsUmT7YH1ri9HvvFOheJZdHm0HRXk1SS51Z5IdWmIiQPEjDH2X5m/eDHrtPTjIB6JRXmnxC8aabdeEDFBba4jHULAky6DfRKVF5CWG5oQOQCMZyScDJIFdnN4kiGgjU7PTtUvN7bIrVbCSKd2yRgpKFKDj7z7V75oA05Lq3huIYJZ40mnJEUbOA0mBk7R1OBzxUteQ6feXXi+FPFeveEvE8rtG4szperQ2sdrb55UFLuN3LFQWLKM4UAAAVc8CeIdV0zwc2r3XhnxRe2+oA6ijy6lb3KQQMgKKjTXRkI2AE5AJYtwOAAD1KiqumX8Wq6TZ6jbq6w3cCTxrIAGCsoYA4zzg1aoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAqrp5Q2z+XI8o8+YFn6g+Y2R9AcgewFWqgsy5gbzXjdvNkwY+mN7YH1AwD75qftL+uxa+F/13J6KKKogKKpX2rW1g6xOWluXGY7aFd0j/AIdh7nA96qfYb/VhnVpDa2zDmygflv8AfkHJ+i4HuatQ0u9ES5dESXGsh5ntdJhN9cqcMVOIoj/tv0H0GT7UkWim4lFxrc322TIKw7cQREf3U7n/AGmyfTFaMEENrAkNtEkUSDCoi4AH0qSnz20iHLfcKKKKzKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArK8Rf8guH/r/ALP/ANKY61ayvEX/ACC4f+v+z/8ASmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigArzn4r6R4XS30rV9f03Si/8Aa1pHPd3dtGzNDv8AmVmIyVxnjpXo1Yl5oGlwalceIYtETUNYWPMbfKZSQuAsZkIWPOB0Kg96APOtYgsLPxFDr9v4d14eHrjTbPTrFdFuzppWU3UyqhhE8L4YyxlcqQA2eOat6Rpz6p440G+0rQfE1rBpGoXC30+sa19qjjP2aWPaqNdSndudBlV6E84zXVwaTrOv6xZ6j4njt7G0sJPPtNMt5TKxlwQJJpMAEgE4RRgE5LEgYoCXxNo/9vWWm+Grq5mvLuaayv0urdYF8xRtZw0gkG09QEbpxmgC5411LXP7P1DTtD0gMPsMjzajeSBbeNSrcKqku78fdwo5HzVPca0nh74Xpqr5JttMjaNVGS8hQBEA7lmKgD1IrR1e2v5vB99aw7bnUHsJI16KJZTGQOuAMt9K5+x8O6vq1/pa+IY47bSdFSFrazSQO11cqgxLIRwFQ/dUZyw3HoKAIvhXBL4f8Pt4M1GUvf6EEGWIzJDKN6OMdVBLx/8AbM1a+IssVtbeH7nUGRNMg1u3e+eT7iphxGzdgBMYTk9MZq54o8P3t5dWut+G5orbXbBWSIzZ8q6ibloJcc7SQCG6qwBHcHaSL+0dJSPV7KIG4hAuLRyJUBI+ZCcYYdunNAHIS30HjH4kafbabKtzpnhzdd3U8TBo3u3QpFGCOCVR5HPplKd8WbhZPA8uiQNu1PW5Y7KwhXl2kLqS4HogBcnsFrq7XSbLTtLOn6RbxaZbhWWNLOJIxET3VQNoPfpWXongzS9F1F9TLXOo6rIuxtQ1CYzTbf7qngIvsgUUAa2p6dBq2mT2N35gimXaWikKOvcFWHIIIBBHcVwPgXU5tS+IGsJq16l3cabarp9lcqm37ZGkredLnABYOY0cLwGTPRgK67xLZa1qdrFYaJeRadDcEreXvJnijx0hXGN56bifl64Jp9v4W0i0j0iO1tfJXRs/Y/LcgoChRgTnLAg5IOckAnkUAcZ4nuNVXwXfaXrokmnsNY0wQ35i2reQtfQFG4AG8cqwHdc4AYCvQr6ee2spJrW0kvZlA2wRuqs/OOrEAevJ7Vy3jiHWdaSHQtO0OaSCS7s7h9Ta4hWGMRXMcrAqW8wnEZHCkZI561t+JbCbU9Fe0g07TtS8x1Dwak5WErnJJwjZ+mBn1FAHkmp6I81rLpnhq6urO6hPyaTo/iC+umHzZKSv5qw2ykbgcqcZ4JPBl0m20f7Cmn2EHiG/g1W3SXQbOPXb2OJYdgSS3crNsRYWU7if4WULuIxXWX/hvVLXS4U1CxfXbTdsOhaIkNjaIvJy4kkBkHQEF9p/uel3Q/Bay+C49P1qE2Vz9uub+D7JIA+nvLPJKojcDGVEm09jyCCpxQB1OlWgsNHsrMRRwi3gSIRRuzqm1QMBm5IGMZPJ71arO0O31e1sWh12+gv50ciO4hg8oyJ2Lrkjd1ztwO4A6Vo0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABVLVtXsdD06S+1S4WCCPqx5JPYAdSfYVdrwHx/4km8QeKLhA7fYrKRoLePPBIOGf8AEj8sV1YXDvEVOXp1Ma1VUo3Ol1T4y3LSsuiaXGkYPyy3jElh/uLjH/fRqlp3xd1Szbbc6XYzQlmcrAzxNlmLMcsX7k//AFq8/or31l+GS+E8z61V7n0FonjzQtc0+S5juhbPDjzYLjCumemB/FnoMZ/Orgn1PVv+PZG02zI5mlT9+/8AuoeE+rZP+yOtfPWnajdaRqUGoWD7Li3bcno3qp9j0r6S0nUYtX0e01G3BEd1Csqg9VyM4PuOleRi8MsM7x1TO6hWdZWYWGmWumxsttGdz8ySuSzyH1Zjyat0UV5zbbuzqSS2CiiikMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArK8Rf8AILh/6/7P/wBKY61ayvEX/ILh/wCv+z/9KY60p/GvUmfws1aKKKzKCiiigAooooAKKKKAGSxLNE0blgrDBKOVP4EEEVGtnEskThp8xLtUGdyCPcZwx9zk1PRScU3dopSaVkyr/Z0PkCLfc7Q+/P2qTdn/AHt2ce2cU5rKJnlYtPmYYbFw4A/3Rn5fwxViilyR7D559yBbKJZInDT5iXauZ3IP+8M4Y+5zTP7Oh8jyt9zt378/apN2f97dnHtnHtVqijkj2Dnl3K7WUTPKxafMww2LhwB/ujOF+oxQtlErxMGnzCMLm4cg/wC8M4b6nNWKKOWPYXPLuVf7Oh8jyt9zt378/apN2f8Ae3Zx7Zx7U9rKJpJXLT5lXa2J3AH+6M4U+4xU9FHJHsPnl3K62USvEwafMIwubhyD/vDPzfjmm/2dD5Bi33O0vvz9qk3Z/wB7dnHtnFWqKOSPYOefcgaziaSVy0+ZV2sBO4AHsM4U+4waRbKJWhYNPmEYXNw5B/3hn5vxzViijlj2Fzy7lU6dCYTFvudpfeT9qk3Z/wB7dkD26U9rOJpJZC02ZV2sBO4AHsM4U+4wanoo5I9h88u5XWyiVoSHnzCMLm4kOf8Ae5+b8c006dCYWiL3O1n3ki6k3Z9m3ZA9ulWqKOSPYOefcgazjaWWQtNulXawE7gAewzhT7jBpFsolMJDz/ufu5uJDn/e5+b8c1Yoo5Y9hc8u5VOnQmFoi9ztZ95IupN2fY7sgew4p7WcbSyyFpt0qbGAncAD2GcKfcYNT0Uckew+eXcrrYxKYSHn/c/dzcSHP+983zfjmmnToTC8Ze52u+8kXUmc+x3ZA9hxVqijkj2Dnn3IDZxtLJIWm3SJsYCdwAPYZwD7jBpFsYl8nDz/ALnO3NxIc/73zfN+OasUUckewueXcqnT4TE8Ze52u28kXUmQfY7sgew4p5s4zLJIWm3SJsIE7gAewzgH3HPvU9FHJHsPnl3K62MS+Th7j9znbm4kOf8Ae+b5vxzTTp8JieMvc4kbcSLqQEH2O7IHsOKtUUckewc8+5AbOMyvIWm3OmwgTvgD2GcA+4596aLGJRCA9x+5JK5uJDnP975vm/4FmrNFHJHsLnl3Kp0+ExyIXuMSNuYi6kBB9juyB7DAr5j2yJlZuJFJD8fxZ5/WvqavC/iV4YfQ/EUl/CB9h1BzKpz9yQ/fU+xJyPrjtXr5VOEKjjtf9DhxqlOCd9jjaKKK+jPJCvfPhmrr8OdLEmckSkZ/umVyP0xXiug6DeeJNXj06wU7m5llxxCndj/T1NfRtjZw6dp9vZWq7YbeJYoweyqMD+VeJmtWNlTW+56GCg7uRPRRRXhHpBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFRXUrQWc0qAFo42YA9MgZrzfwnrXxM8VeE9O12C68JwR30ImWF7G5yoPYkTUAem0VyfhXxjcalHrVn4jso9O1XQZAl9HC5kiZGTekqHAJVl5wRkYxWTpmu/ELxNpEOvaFaeH7HTruPz7Oz1ATPcSxEZQu6EKhYYOArYBHWgD0Kiua0fxXNrHgi51h9Ol06+tUmS4srkE+VPFkMueNy5HDDqD2rL+GfjfUPFWmeV4jgtbbV/s1vfKlqrLHLbTxh43UMSeDuRueqe4oA7miuYXxLeN8WpfC5jg+xJoiaiJNp8zzDO0ZGc424UcYznvWE3iHxvrHxA8TaL4cl8P21noj2yK1/azySSebAshyUlUcEnt0xQB6JRXEWPifxHpHi7TdA8aW2myDV1kFlqGmeYieZGu9o3jckqSoJBDHOMYqvqFj/bnxmudNvb7VI7KDQLedILPU7i1QSNcTKWIidckhQOfQUAd/RSKoVQozgDAycn8zXP6pr91Y+PvD2hxRwm21O2vJZnZTvUw+Vt2nOAD5hzkHt0oA6GivP7/wAQ+MtQ+I+q+HvDEmhW9vp1pb3Bk1C2mkdzLu4ykijjb6VPD4m8UaD4n0jSvGcGlXFvrMjwW19pYkjEUyqXCPHIW4YA4IbqORQB3NZXiL/kFw/9f9n/AOlMdc54w0tNN1LSNVsr3VYrm41q1ilQarcmFkZ8MvkmTy8EdttdH4i/5BcP/X/Z/wDpTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAI7rHGzyMFRQSzE4AHrWJY2UetrcahqlsskN5H5UFvMmQsHXkHux+Y/8BHapNS/4muorpCc26AS3rdiv8MX/AAIjJ/2R/tVZ12/bSvDmpahGMtaWks6j1KoW/pWnwR82R8TPHfE/h/w4uuXVh4Uh17ULu1YC7g0y1W5htWI+4Xd0Ab/Z3kj0FWPCPgLRPErXAOu3vnWbhLuwey+yXFux5AdXLYBHQjg9jXc/CjTo9P8AhXoDIS8t7Zx31xKxy0ssyiR2Y9zlv0qh4iA0z43+Dry0+STWLa9sLvH/AC0SOPzoyfUqykf8CP47rGYhK3MZ/V6Td7Ev9v6B4LvJfD/hrQNT1W8gVZbyHSbcStFuHymWR2UbiBwCxOO2K6Tw34m07xVpbXulPJiOVoJ4Z4zHLbyr96N0PKsPT8elRzjQPBlhq+t3LRafbzym8v7iRyd77VXPJPZVAUd+gya4G1bUNP8Ahn4/8Yz282nza1Hc31pauMSQxrb+XEzjsx2hiO2RXK227s2SSVkb8nxY0ZBJdJpusS6LFIY5NcjtA1muG2lt27cUB4LhSvvXcI6yIrowZWGQwOQR61zWkaTawfCmz0kRKbUaMkDJjhlMODn68/nVb4T3ct78I/DM1wxaT+z4kLE5J2jaP0FIZ19FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBX1H/kF3X/XF/wD0E15P8LtZ8bxfC7QINL8I6fcWq2YEN1NrXl7xzhighJH0ya9avI2lsLiOMZd4mVR6kiud+Guj33h/4a6FpWrwfZ720tVjmi3q2xsnjKkg/gaAI/CvhK6sW1vUfE08F3qmvyKbxbYMIYo1TYkSZ5IC5+Y4JLHgVj6fovjrwLp8eneHzp3ibRbRdlra3khtbyOMfdjEgBR8DgEheld1qdm2o6Td2SXM1o1xC8S3Fu5WSIsCAynsRnI+lcXp2r/EDRNPh0zUvCg1+4t18oapa6lDFHcgcK7rIQ6sRjdgNznGelAGhZeK7Xxb4D1m6gt57O4tY7i1vLO4AEltMiHchxweoII4INcbpqS6V8L/AAN46tVZpdE0qGK/SNcmawZFEgwOpTasg/3CO9dV4c8KanpvhfxFJqhhk1nX5p7uaG3b93EzxhEiVjjOAoG44yc1p+A9HudJ+G2h6RrFusdzbafFBcwMVcBgoDKSCQfwyKAMC1mjuf2iJJ4HWSKTwjC6OpyGU3chBB+lY2naj4jsfjH8QB4c8P22ro81gZWn1L7L5Z+yLgAeW27PPpjFX/Bfg3WfDvxLuXuLTOi2Wk/2dp175ykyRef5scRTO4FA7JkjBCg55rd8M6HqOn/Efxrql5b+XZ6pLZNZy71PmiO3CPwDkYYY5Az2oAw/C7ar498ZLrfiOK00weFrq4tYtIgkaaRbhlCmWSQhQRsbKbRg7s5yMVrW/wDyXq//AOxatv8A0qnqa40PUdM+KNvr2jW/m2OrW32XWUDquxowTBPgkbiMtGQOcEccVk3+v6PoHx1u5Nd1ax0yOXw3bLG95cpCHIuZ8gFiMmgC/wCJp7/XPH2neErS+udNsvsMmpX89pIY5pVDrGkSuOUBJYkjnC4BFZMmiT6J8ZvCcI1S8vrJrDUTBHeymaSFsQb/AN63zMp+XAYkgg84IA2/Euk6tB4r03xf4Ytk1KaC1ksryx85Yzc27srqY3b5Q6sueSAQSMiqEdn4p1n4naDruo6Kum6VY2d5D5T3Mck0byCLl9rEfNtwApbG0kkZAoAyJI/Ez/HPxN/wilxpMDjTLHz/AO0reWUEfvMbdjrjvnOe1TuNY034gaDefEhoLtJJ2ttJuNNPl2tvcyIRiSJgX3soZVbew9lJzVm7h8UaD8Vtb1vTPClxrVjqNjawpJBe28W1o9+7IkcH+Idqku9O8T+Otb0Q63oa+HtI0m+TUXSa7jnuLmaPPlqBGSqqCdxJJJwBjrQBsePv+PbQP+w9Zf8AoytbxF/yC4f+v+z/APSmOuX8ceI9DuNQ0TSLfWdPl1OPXrPfZJdI0y4kycoDuGPpXUeIv+QXD/1/2f8A6Ux1pT+NepM/hZq0UUVmUFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFU9Uvxp1i0wQyysQkMQ6yOeFX8/yGTVysexxq+qHUmGbW2LR2f+0ejy/j90ewJ/iq4pbvZEyfRFvSrD+z7PbI4kuJWMtxL/AM9JD1P07AdgAKsXdrFe2U9rcLuinjaNx6qwwf0NS0VLbbuxpWVjy/wl4vsvh7oEPhTx9c/2XcaSPs9rezRsIL63BxG6PgjO3AKk5BHpVzSZX8efEqz8TW0E0fh/QrWWKwnniaM3lxNgPIgbB2Ki7QSBksccV22uaPaeINBvtI1FS1rfQPBKAcHawxkHsR1FZHhjQvEujzCPWvFMesWUcHlRRf2asMoIxhmkDnccAg/KMk5pDOD1fxt4R1j4lXcPjHXLK10zw3cCO00+4Yjz7sDLTuuOQmdqA99x9K7n+1tB+JHhHWdP8P6rb30FzbS2cssLEiMyRlefwOa6iigDyi0+JVrYfDyPQrqK4/4TK3sfsP8AYohdppLhU2BhwQY2I3b8kYPWu88F6EfDHgfRtFkYNJY2ccMjDoXCjcR7bs1t0UAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUEhVJY4A5JPasa58XaDaSbJdSiJ/6ZguPzUGplOMfidhOSW5s0Vm2PiHSdScJZX8Mjk4CE7WP0BwTWlRGUZK8XcE09goooqhhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVleIv8AkFw/9f8AZ/8ApTHWrWV4i/5BcP8A1/2f/pTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRUF7eRWFlLdXBxHEu44GSfQD1JPAFNJt2QbFHV5pLiaLSbRistyC0zqeYoRwx9ifuj3JPatKGGO3gSGBFjjjUKiKMBQOABVHR7OWKKS8vgBe3ZDyjOfLH8MY9lH5nJ71o1Uml7qJj3YUUUVBQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFIzKilnIVVGSScAClrF8YTvbeEb+SI4YoE/BmCn9CamcuSLl2FJ2TZ5p478dNcW91MJHj022Ussa8GUjpn1JPAH0rkfD+rSa1pIu5rX7JJ5skTw+Zv2lGKnnAz0qpf8A/E38SW+mjm2sNt1dejP/AMsk/MFz9F9ai8Mu0Xhm9kjGWW7u2UDuRK9fOVG5x5pfE7HmS95Xe44+Jr6Yz3GkaO97Y27sjXAuAjSFeG8tMfNggjqMkcV678OfHQ1m3tra4n8+O4jD2s7dSMZ2n/PtXlHgxBH4L0kL3tlY/UjJ/U0nw7uJLXQ7eSI4NtezeXjtiZiK0hU9jJyj0dvValRlyO66H05RRRX0J6QUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFZXiL/kFw/8AX/Z/+lMdatZXiL/kFw/9f9n/AOlMdaU/jXqTP4WatFFFZlBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFYxxrOt7fvWWmyZPpLcf1CA/wDfR/2asaxeTQQx21iR9tu28uHIyE/vOR6KOfrgd6s2NlDp1jFa24IjjXAJOSx7knuSeSa0Xux5urIersWKKKKzLCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKp6vYDVNHurJiB50ZVSegbsfzxVyik0pKzE1dWPmi/8ABkMWrXjy3Op2lxJKTOkF48Y3AY6A+gFZ3g7Q2sLSeW4kvt7zzp5NzM5Qr5pw2w8ZIAO7vk+tfQ/iPwhZ6/8Avg32e7AwJVGdw9GHf61w9z8P9ehk2xQxXA/vRygD/wAexXh1qFeCcVqjgnTqR0WqPK9Nvb3w5pX9jvpN7dz225LSSCLdFMmSUy/ReCAc+neuy+GnhWcrpumzAOYj51246ZLF359ycD8K6nT/AIc6tcSD7c0VpHnn5t7fgBx+teg6LolnoVl9nsk68ySN95z6n/Cro4epUleasr3fmVClKTvJWNGiiivaO4KKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/wAguH/r/s//AEpjrVrK8Rf8guH/AK/7P/0pjrSn8a9SZ/CzVooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACmyypDC8srBI0UszMcBQOpp1Y9//AMTfUhpa820G2W9/2u6R/jjJ9gB/FVRjd6ibsh2kRPdzSaxdKVkuFC26EYMUHVQR6t94/gO1a1FFEpczuCVkFFFFSMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/wAguH/r/s//AEpjrVrK8Rf8guH/AK/7P/0pjrSn8a9SZ/CzVooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAKeqX/wDZ9nvRPNnkYRwRZ/1kh6D6dyewBNGl2H9n2Iid/NmdjJPKR/rJD94/4DsABVPT/wDibak2qtzaw7orIf3h0eX8cYHsM/xVsVpL3Vy/eStXcKKKKzKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKyvEX/ACC4f+v+z/8ASmOtWsrxF/yC4f8Ar/s//SmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACiiigAori9f+IMNjM9tpEaXMqnDTOfkB9Bjr9f51yz+PfEDSFlvEQZ+6IUx+ozXFUx1GDtv6GEq8Iux67RXnWkfEmdZVj1mBJIzgGWEYYe5HQ/hivQLa5hvLaO4tZFlikGVdehFbUa9OsvcZcKkZ7EtFFFbmgUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVk6xI95NHo9q5V7hd1y69Yoeh57Fj8o/wCBHtV6+vYtPsZbq4J2RjOFGSx6AAdyTgAe9VtHs5reCS5vsfbbtvMnxyF4+VB7KOPzPetI+6uZky190vxxpDEkUShERQqqBwAOgp1FFZlBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWV4i/wCQXD/1/wBn/wClMdatZXiL/kFw/wDX/Z/+lMdaU/jXqTP4WatFFFZlBRRRQAUUUUAFFFFABRRRQAUUUUAFcx491d9N0Hybdtk123lgjqF/ix+g/GunrhfifA7WenzgfJHI6MfdgCP/AEE1zYqTjRk0ZVm1BtHz9pGleFbizNxrSWDXd3eXLKbiQK8n79wMZPPSt7X5DoXhOSLR1W3f5Le2CjiMu4UEfTdn8Kms9A0MWMiW9pbXEFwWZ3YCTfknPzfifpXLB3f4Y2txKzSR2N6jK5OSYo7jaDn2UfkK8a/tJp3dr7M4vid/Mv61oNn4b0VtY0lHivrErK83mEtcKCN6vk/NkZ/HFe0fDXWWF5JprvuhnTzYs9mHXH1H8q8p8cOP+EJ1FRy0sYjjA/iZmAAH4mvQvh1ayHxRa7eRbwszkem3b/MiqoTlzwl1vb5aDpyfNF+Z67RRRX0B6IUUUUAFFFFABRRRQAUUUUAFFFFABRRWbrF3NFHFZ2Jxe3hKRNjPlr/FIfZR+ZIHeqjFydhN2VyFf+JxrW/rZac5C+ks/c+4Tp/vE/3a2Khs7SKxs4ra3BEcShVyck+5PcnqTU1OUrvTYUVbcKKKKgoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiqOt6rBoOgahq94kj2+n2sl1KsQBdlRSxCgkDOBxkisn/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqj/hKNX/6ETxB/wB/9P8A/kqgDpKK5v8A4SjV/wDoRPEH/f8A0/8A+SqP+Eo1f/oRPEH/AH/0/wD+SqAOkorm/wDhKNX/AOhE8Qf9/wDT/wD5Ko/4SjV/+hE8Qf8Af/T/AP5KoA6Siub/AOEo1f8A6ETxB/3/ANP/APkqtLQNaj8QaQt/Fa3Fp++mgeC52eZG8UrxODsZl+8jcgkYoA0qKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/yC4f8Ar/s//SmOtWsrxF/yC4f+v+z/APSmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACqWraZDrGlzWVzwsg4YDlT2Iq7RSaUlZiaTVmfOGt/DZtFvp7WS51CztZnZmgtp9sEuepHGQD3AIqddPtF00aeLdPsgi8rycfLsxjH5V9CXFtBdwmK6hjmjPVJFDA/gaxn8FeH5JC7aaoJOflkcD8gcV5VXA1JP3ZaeZyTw8m9GeCad4Kjlv7WOOfUdQEDhrW0ml3pGw6EADJx23E4r3bwh4a/sCwZrjDXk+DJjkIOyg/z/APrVsWOl2OmJtsLWKAEYJReT9T1NWq6aGF9m+ebuzWnS5XeTuwooortNwooooAKKKKACiiigAooooAKKKKAGTTR28Ek07iOKNSzux4UDkms3R4pLh5dVu0ZJroARRt1hhH3Vx2J+8fc47VHeH+19WXTk5tbUrLeHszdUi/kxHptHetmtH7sbdWTuwooorMoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDm/iP8A8ks8V/8AYFvP/RD10lc38R/+SWeK/wDsC3n/AKIeukoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACisTU/F+jaVI0U915sq9Y4RuI/Hp+Gaz4fiNoksgVxdQj++8QwPyJNYvEUouzkiHUgnZs6uiq9lf2uo24nsZ0njP8SHOPr6VYrVNNXRe4UUUUwCiiigAooooAKKKKACiiigAooooAKKKKACiiigArm/Af8AyLt1/wBhrVf/AE4XFdJXN+A/+Rduv+w1qv8A6cLigDpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/yC4f8Ar/s//SmOtWsrxF/yC4f+v+z/APSmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKpatfnT7LdCnm3MrCK3i/vyHoPoOST6A1drH0z/ia37au+TAoMVkp6bP4pPqxGB/sgepq4JbvZEyfRF3TLEadYrCXMkpJeaU9ZHPLMfqfyGB2q3RRUttu7GlZWCiiikMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDm/iP/AMks8V/9gW8/9EPXSVzfxH/5JZ4r/wCwLef+iHrpKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArzv4ma34p0nwzc3UVrpdlYQ31ni+GtSxSCM3UQ+dRBhVYHa3zkBS33uh9ErzH4meMLG68GyWllDq0V22oWPlPcaBeiPct3E3eNQ3Ck7QwLYwOSKAM7xZ8U528F62tnqvguK4OnziKSw8XF7hW8tsGJRbqWcH7oBGTjkda9A8O3XiSeOAa1pmm29t5CkTW+qS3EjNgYyrQIOecncfxrzrxn4o1y78B+ILeTU/NSXTbiN4x4G1SAtmJht8x5CqZz95gQM5PFd/oHi/TNRhsbW2g1cPLEoV5tFvIovu5yZHiCAcdScGgBmreI9Zg8Xf2Loml6fd7LAXsst7qD2wUGRkwNsMmfu55xXnnxE8ZeJ7PVrJJX0XS0t4ZDcRw69KUmEgXbuzAo4AyOD97tXc3i7viZqjAg7PDkYYZ5G6aXHH/AT+VfPl1a3MXhRZbbw9YW/k28M++CRQx8va+cCMZJ2+vU1yYqbjFJdTGrKyt3NrTNY1HU5v3dpY/Z0cCSVLqVuMfw5hUN+Bq7rF5c6fpsl1aW8c/lAvIryMuFAySAFYk+3FMs7nVZ5I2uLOxS2cZ8yG9eRsYyCFMSg9u9ZHiI6ek8ks3hyC8m3Khurm1DLk4CgYVnc89FU+mRXhKKc7W/r7zgSTlsa2l+I/E2m69aJp19Y2i3VtJMXiiabcqmMY5IHPmZBIOMe9ex/D+6Op2d9qIv8AU9QjefyUub6VNsuwDcUjRVVAHLpwOdmSTXzK+iaA2r2zTWs3mvBMziPRZowGDR7SkXlFSq/MDuz98ZJ4x6l8MP7CkiaK5+H9nf3FlcoRqNppCJJDu5RmjlVXUZVsMhfGOcV62ElyvkW3pY7KLs7HrfjXWrnw34G1nWbFIpLmws5J4lmBKFlUkAgEHH0Iqv8AYfG//Qw+H/8AwQz/APyZU3iDTda1JZYLW/0WPTZYdk1tqWkvdb+u7cROilSOxX15rx/RZPCGq2k1xc6j8JbBVuZIoUn0GEPJGjbRIVN2Cu7BIHpg98D0jpPWdFv9dTxVeaPr13p14sdlFdRS2Vk9sQXeRSpDSyZ+4DkY610teZeErWEXNxH4F8SfDwTsga4XRtCG4qDwWEd5nAJ7+temLuCjeQWxyQMAn6UALRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABXN+A/8AkXbr/sNar/6cLiukrm/Af/Iu3X/Ya1X/ANOFxQB0lFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWV4i/5BcP/AF/2f/pTHWrWV4i/5BcP/X/Z/wDpTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUVW1C9j06xkuZgWCDhV6uxOAo9ySB+NNJt2QbFHVna/uU0aBmHnLvu3U4McPTGfVj8o9tx7VrIixoqIoVVGFAGABVHSbKS1t3mu8G8um824IOQGxwo9lGAPpnvV+qk18K6Ex7sKKKKgoKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA5v4j/8AJLPFf/YFvP8A0Q9dJXN/Ef8A5JZ4r/7At5/6IeukoAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACvONUs9MtdVLX2seL5dYtpdyajDoct0IlIPyRYtXgUYYZZF3HaAW6ivR6KAPH7KaSLxZq12/iHx1HFc29si3K+FstOV8zKsPsBwF3DHAzuPJxx0vhPTdLW+iXw/qHiW08geZcQ3emy2tvc88/JLAkakk5IhCHjOOtd3RQBwn2bW5Z/FGvQwJaSXMi2cK3cEkrfY7dXG9Y4/mZmkeRlUckFe5FeValbnRpbQXN5rV3axwJEAPDV1axOVXbgh4yxOBnhsfyr6QqtqGn22qWT2t7EJIn6g9QfUHsawr0VVhymdSHPGx8y6U+pJFbWVpbyCxjl/d3UqmMiAZxG0bgPu6LnGCOcirPiptukxN5k0WLuD54I97r+8HKrhsn2wfpXp2p/De+hkZtLmjuYuySHY4/ofzFUIfAOvyyBXto4R/feZSB+RJrxJUayqX5DhcJqXwnkzvNL4gtJY9S8ROi280ZlGkHcrM0RCgfZ+c7Seh+6ORnn2b4SWv2TU9bia51G4k+z2bSNqNi1rIrEzEqEMcZIH97Byc8+nS+G/BFtosq3V24ursfdOMJGfYdz7mupr1cLQcFzSVn8jrpU3HVle/sbfU9Pnsb6Pzba4jMUse4jcpGCMjnpVfUtQt9A0kTm0upIIdsaw2Fo87qOgxHGCcD2HFaFFdpuch4ZafW/GWreI5LG8s7NrS3sLNb23aCRwjSSSP5bgMATIqjIGdhrr6KKACiiigAooooAKKKKACiiigAooooAKKKKACub8B/8i7df9hrVf8A04XFdJXN+A/+Rduv+w1qv/pwuKAOkooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKyvEX/ACC4f+v+z/8ASmOtWsrxF/yC4f8Ar/s//SmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigArHi/4nGsmY82WnuVi9JZ+jN9F6D3LegqXWLuZVisLFtt5eEqjj/lkg+/J+APHuRV20tYbGzitbZdkUShVHt/jWi92N+rIersTUUUVmWFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHN/Ef/AJJZ4r/7At5/6Ieukrm/iP8A8ks8V/8AYFvP/RD10lABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFc34D/AORduv8AsNar/wCnC4rpK5vwH/yLt1/2GtV/9OFxQB0lFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWV4i/5BcP8A1/2f/pTHWrWV4i/5BcP/AF/2f/pTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAEN5eW+n2ct3ezLDBCu55HOAoryfXfi/fTTNF4dtY7eAZAnuV3SN7hc4X8c/hSfF7XpJ9Wg0OF8W9ugmnAP3pG+6D9Bz/wAC9q84r3MDgYSgqlRXuediMRJS5IHRw+P/ABPDqTX39pLJM6hG8y3jIKgkheAMDk9MV3nhX4rxajdR2PiKGOzmkO1LmInyWPYEHJX65I9xXkFBAIweQa76uCo1I2tZ+RzQxFSD3ufU1FcT8LNfl1jws1tdyGS40+TySzHLNHjKE/hlf+A121fMVKbpzcH0PYhJTipIKKKKzKCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAOb+I//ACSzxX/2Bbz/ANEPXSVzfxH/AOSWeK/+wLef+iHrpKAMDxvrN9oPhWS+0r7P9rN1a28ZuY2kjXzriOIkqrKTgOTjcORXN+JrTxBq2k6xoOp+JdCcf2eZ7qGLw/MXELbwCN13tyTG4Gf7ta/xJXzPCMMCkb5tX0xEB7n7dAf5A1iy6d4ihGr+IruHC6xbSxXdg8i7rKCON/s5B7nli65PMvBO3kA0obzxXLHppPiTQY31NN9tG/h+fc3ybyDi8IGF98Va8W6xHofga8XxG8lzJLYzrLNY6ZO8PCHJZU8zy1wertjrzWHbab4hv/sGu2EfktotlFDp9nM4C36vGpnLEZ27hsVD1DISeGIrS+I1ybzwr/YiqY7jVY3MsRIJS3jXzJt2DjBAEeR3kFAGJBquj6xonh1LLTPFV/NJYBIYtNu7jTFKRpGS2JJoFcfvFww3Z9eK5rQ2vbr/AIRnz9H8cXP2zT5pZ9niVl+1MvlYdc3o2gbjwdv3hwccas0Wk6J4Z0mz1TWNHjuoEE2mxXfiabR5YbSZAWBeLLMBIpVRjbtUc5XByIbjw3b/AGfyNQ8LxfZkMcGz4o3w8pTjKrhPlBwOB6CgD13wi9lP4WsrrTBfrbXUYnRdQupLiZd3OGd3c/huIHaqngfVrzVPCCaprF0khuLi4eN9qoFh85xEDjA+4F596l0C70ceDEHha8tLizs7cxRtZ3f2pI2Vfu+YSSxHHXn1rO8D2ekX/wAMdI0K5jttQit9LtIru2niDoSYUcblbI5yGx9KAH654oj07xpoFv8A2vbW+nXEN210HkjCsUVChLHlcZboRnJznttXPiTRrXw9JrsmpWzaWiFzdxyB42AOPlK53HPGBkk8da43UfBfhfT/AIkeF1sPDWkWqSRXpkENhEgcqse3OF5xk49K7XUrLOmBLHTbG7mt2WS2t7pvKiVweDuCOVI5IIU0Acemra7ozS+K/EBuYtH1AhZ7EDc2kwjiKbHPJyTL1xleyEnFvdfu21izt9F8Z+L7+0S6ki1C7ttAjuI41RG+VHjsSrMX2cgsAN3qKXTZ4tOu7rV4Phv4TsX07Uxp891aXQE6vIyIzJi0XIxN3ZcjIqLRrHztQ8QuPD3iy+H9t3Y87Std+yQH950Ef2yLBHc7OfU0Ad14Nu47+1u7i38Q6trKJN5DrqllHbPbyKMsuwQRNkhlzuB6DGOc09F1vURdeLHNpe6wbPWxbW9rbvEGSP7NbvgeY6LgM7HrnmqHw3sLe60PxLY32nTi2k1meOWz1SUXUm0xx5WRi8gf8WauftPDOl6fpfxDufD+iW9rqdrqEsFjLptoEuIVNlbnZCYxvXlmOF7k+tAGz458V66nhfdb+FPEOnP9ush54ubNeDdRBkzHclvmBKdMfNzgZI6bw5d6tcXt+NT0zVbO3dxLbjUDany89UVoZnJGeRuAxnGTxjz3Ul/d+Ip9FHiVtKtNHjvANX+34NxDOZSE+1852ov3a7zwXO+qrquvi4kltdUvS1kC5KC3jVYkZR0Acoz57hx7UAR+KPGN/wCGVu7hvCuoXunWsfmPewXNsqEYyQFeUOT2xt5PTNZng668dR6dbR6voSCS5uWuLu4v9VyYUkkLlI41RuFU7VUlenOKPEmnX/i3XHh1SaXQ/C2iSrcSzsyxvfTKA4YFuEhTru6lhxjbmsTRtd1mfxjd6R4Ce4udLnsY7mO88QTzypC3mOjSRbyZZUbC4BZVypIODyAesV5r8VY/EcHhO5uX1XTDpyajYslumjzSTAfbIdvzLP8AOQcEgIC2CBgkEdp4f0i80i1mGpa1d6vc3EpleW4VEVDgDbGij5F4HGT3OeTXCfEnxFqN/wCHo9Ej8Ma3aXt7f2ptWWawZ38q5jkZkTz2JIVCclSo43YGTQBmeNfFGuXHgHxBDPqe+KTTLlHX/hBtUt9wMTAjzXkKx/7zAgdTwK9E8N2viKGC2OrappdzafZ1CxWmmSQODgY+dp3GMdtv5V5z4nfxNqfhfxBpUDeNrm6/s+VJbWQ6GwHmRsFDrF+82tz935iAdvIru/Cvi2bW7Kx+zeHNTjtHQIb1riyeJCBzny7hm6jGNuQeoHNADNY1XX38cPpGjX+m2NtDpa3sr3lg9yWJkZeNs0eMBfeuR1HXjcanpmvH4geG7p9PDpB9g0G4uVYz7UwRHdMSxIAAGDk45rqroCT4mauytkw+HIg4weN80+P/AEBq5yXT/GF38GbXyLnSJUh0q3uoIVtJRI5iRJUXd5uNxKAZxigDpfDl14w1W787ULq1t7GGUZWTQpLaS5XH8G66cpz/AHkB9qZ488b2fh7TbpLLxLoVjqtqnnPZX0qNLKm3OxEMqYcjoTkH05zWjoLeIr0WeoXOuaPe6ZcRCZUtdJlheRGXKkO1y4HUH7pyOOM5Gf4y8QeJtLRhpOlxpbtPFbx3RdJppXkZVAjhLIvVsZeRQMdCKAOTfxrp1/4h022uvitYrpt1YT3E72c1pbbJFeARxszbmQsskh27g3yexrU8B+LPBMdzqH2PXdJjlub429u1xrAmu7xUwgdzI5Yln37QP4SuBzWPcaajeM9Ma+8I+JrrU5NPvGeeeex+1THzLb98kqXQERjO0BV2jEpwMbq6Lw/4g8X/ANqXOmz6TJeR2flGQajJBb3aRybtrZheSKX7jZ/1Z9jQBvfEDVLzRPh3r2p6XN5F5aWEs0Eu0NsdVJBwwIP4iuY/t/w//wBFt/8AJ3Sf/keut13TrhzJf/8ACWalotpBEWlS3S0MahckuTLC7DjrzjjpXn+ga/qN/p73Wq+KfHMHmzyG2jh8Lh/3GcRszCwKlmUbuOBuA7ZoA6Twdrkd/wCLdRsbDxj/AMJTYw2MMwl8y1k8mRpJARut40HRVODmuxvb2202xnvb+eO3trdDJLNI21UUDJJPpXD6TKda1OTTrPx34uju4oRO0N5o1vanyy20MPNsVyM8cehq/wCOVWW88J2F627T7rWkW6L9JCkMskSsPQyxx+2QB3oAq6p4+1aG3srrSvCzSWl9eQ2dtJqV59kaYythXEYSRgo6ncFbAPHY69v4pnttWttM8TaYdLuLxilrPHN59tO+CfLEm1SrYBIDKuccZPFZ+pzDxD8UNK0u3PmW3h5G1G+I5VZ3Ro4Iz77WlfHbCnvSfFeRR4IFvHg391qFnFYL/EZ/tCMpX6BSx9gaAO0rzrxfN430Lwve3y+JrE3TuIbGC20kBnlkbZEm55GB+ZlJO3sa6/xFro0GwheK2a8vLu4S1tLVWCmaVskDceFAVWYnsqk4PSuDvLbxp4k8ew2janoYTQAl88K2ErwpcOGWONn84M7BCz5woGUO05GAD0iK4W1itLfULuE3cqhASQnnOFy21c+xOB0FM1jWLHQNKl1LVp/s9pDt8yTYz7csFHCgnqQOleaa14m1Cz+IeiJ4z0yOG30WOa+mvdMd7iFBIhhjkkXaGjXmXJOQMZzjJr1O1uoL21iurOaOe3mUPHLEwZXU9CCOCKAOZj+IFleZ/sjRtf1Idni0uWJG+jTBFP51kwfEnWNVkn/sLwVeTQW+7zbu81C3hgQrnIMis6kjHO0tt5zgitXx/LLLZ6PoyTPBDrmqR2FzJG21vJ8uSV1BHQsIimRyA5xzWtqmitceH/7P0W5bSZIFU2j26gJEV+6pToydivQj04IAL9jcG70+3uGEYM0SyERSCRRkA8MPvD0PesLwH/yLt1/2GtV/9OFxV7w3oq6DpAtUAj8xvOa3jctDbuwG9IsgER7txAPTcegwBR8B/wDIu3X/AGGtV/8AThcUAdJRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVleIv+QXD/1/2f8A6Ux1q1leIv8AkFw/9f8AZ/8ApTHWlP416kz+FmrRRRWZQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHgnxMgkh+ImotICBMsUiZ7r5ar/NWrlK9s+Jfg6XxBYxajpke/ULNSpjA5mj67R7g8j6kd68T6MykEMpKspGCCOoI7GvqcDWjUopLdaHjYmm41G+4UUVZ0/T7vVtQisdOhae5lPyovYepPYDua7pSUVdnMk27I9L+CsEgTW7gg+U7QRqe25Q5P6OtepVjeE/DsXhfw7Bp0bCSQZknlAx5kh6n6dAPYCtmvkMTUVWtKa6nu0YOEFFhRRRXOahRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHN/Ef/AJJZ4r/7At5/6Ieukrm/iP8A8ks8V/8AYFvP/RD10lAHK+K4b6+1zRLa2sLi4tLOWTU7hogo8xoVIihUswUO0jqwyQP3ZyR1rnNZ0PTNUtr9z8HJHv7tJD9plttKLmVgfnZvtBOcnJPWu31zxToPhkQHxDq9npouN3k/aphH5m3GcZ64yPzFZH/C1fAX/Q36P/4GJ/jQBzuleH9JsLGyEnwaY3dvHHumS10rPmKBlg32jOcjOetdtfh9S8L3dzJpc1reyWU0awTCN5k3KfkzGzDkhThWOeO9Zf8AwtXwF/0N+j/+Bif410VtqtlfaQup2Fwl1ZvGZY5oWDK6juD36UAcuF12607R7G3hudN061s4Lm8u14nm2qD9njj+8CSvzFgDj5QCTkGjwXOvHxTc2jajpCX91EbO6mtXglBSCJd4jkAbbuUjDAbgD2Oa27fxLZ3PgmPxQkU4spNPGoLGyr5nlmPzAMZxux2z171JHr9tLeaVbJFNu1S2e5hYhcIqBCQ3PX94Ome9AC6O+p3ekGPxFZxW92paKUQSbo5gOPMTuFYc7TyOnPU8novw+v8ASPhOPDA1CN9QLI01zuYLcKki4jYrhgrQxrESOQvrXf0UAeZ23wuW8160v7jSdJ8LJYpJ5X/CN3DiaWRgAHaTy4wABn5Srbs8nAwfQdLtruz02G31C+bULiMENctEsbSDJwSq8ZxgHGASM4GcVlSeNNMt7PWbq6S6ht9GvRZ3chh3hTsjcuApJ2BZVJY4xg56VvRyJNEskTq8bqGV1OQwPQg9xQB5zPoGq/Y9ceeaa0sDrzX0tvFYG5mvI1MDJ5W1hty0ZBOG49MZqxpfguXU5tV1G7t7/QVvnM1tZxa1eK6yNktLKsM4jBYkfInTH3snA7l760ivorOS6hS6mVnigaQB5FXqQvUgZGcdKnoA47wrpl1Y6RqeirZXmi35cyvqIuGvI55HGPOjeZnYn5RlHGRjuMEpH8PI9OuTf6LqUkerzTmW61O+iFzM4KbG2KSscbEKg3KuMLjB4x2VVdU1Oz0XSbnUtTm8iztI2lmlKltiAZJwASfwoA87l8Pa34j1K506O61q3047rbUdX1KbZLdx5+eK2gUKkatjBl2A4+7nOa1vBc+u2N5ZeGLuwnitNFs5LeW9eHEV0FaNbZo36EmPeXA+6wx3BrtYZUngSWIkpIoZSQRkEZHB5FPoA5/xtot1r3hs2lkkM0iXMFw1rcNtiuljkV2ic4OAwXHQjOMjGax/7V1pNZOpJ8ONT+3NAtqZv7StNnlhi2Med0BJOduf5V1kOq2c+sXWlRTbr20ijmmj2N8iSFgh3YwcmN+Ac8Vjnx7onnTxxR6xceRNJA8ltoV7NHvjco4DpCVbDKwyCRkUAbenz3Nzp8M19aGyuHXMluZBJ5Z9Nw4P4VxN9oVnZXdxBa+DfE947SB31Sz1iOKafg8ec12kxQbj8hwueg4BrrdF1+w8QQ3Mmmtcf6LN5E8dzaS20kb7FfBSVVb7rqc4xg1pUAeS2vh65i8RaheS+EfHH2a4hgSIJ4nAkDIZN25vt+SPmXGScc9M89PoGhWMusR3Z8KazolzbqG+23V/GzXRHG2VoriRpjg/8tM9OvArW03xhpOreKNR0Gzkc3engeYzLhJDxvCHPzFCVDY+6WUHrW7QBxX9g65KviPVHmks77ULjbFFapFLI1pCjLHGpkIQO5LPknAMmDjk1m6FaXuiJZBvC/jW/axiEUH2rUrDYqhdo/dJdLGcDoSpI+tej0UAcJoOjeJYvsdpEg0vQYbw3KW9zIovLeMEkW2ImeNo9xGG35CfKVPWtH4iWc974ZgitrK+vmGo2jtBp8hjmZRMpba4ZNhAGd25cdciuqrO1LW7XTNQ0yymWSS41OcwQJEoJG1GdnbnhQF5PqQO9AHms/h26k8VWN+nhHxx9kgsrmGUN4nBl3u8DJtb7fkLiN9wBAJ2ZBwCvR+BrCe08S69K+k61psMsNoIxrF4buRyPN3bZPNlBAyPl3cegzz1Gu6zbeHtEudUvhI0NuoJSIAu5JCqqgkZYkgAZ5JrQByoJGPY9qAI54Ibq3eC5iSaGRdrxyKGVh6EHgiq2r3t3Yae0+n6XNqkysALaCWON2B6kGRlXj3Iqxd3dvYWct1fXEVtbQqXlmmcIkajqSx4A9zWB/wsfwR/0OXh/wD8GkH/AMVQBF4as9Uu/E2q+I9b05tMe5ggs7WzllSSSOKMu5ZjGSuWeU8AnhR9K29Z0XTvEGlS6brFql1aS4LRsSOQcggjBBBAIIIIqLSPEuha+0q6DrWnam0IBlFldpMUB6Z2k4zg9fStOgDH0vw1YeHNFnsPDMEWnmTc4ldWmJkIxvcs26Q9OrZIGM1Q0rwWsGtx654g1O41zVoQy28s6LHFaBuCIYl4UkcFjuYjjNaM/ijR7aG8lmvMR2N3FZXDCN22TSFFROBzkyoMjIG7nGDWtQBleIPD8HiGzgimubm0mtZxcW11asqywSAFdy7gR91mGCCME1DZ6SnhTw/dLolpPqV2zNO4lnXzryZurPI2Bk8c9AAABgAVd1vVYNB0DUNXvEke30+1kupViALsqKWIUEgZwOMkVK+oWsNhHeXU8dtBJsAedwgBchVXJOMlmAA7kgCgDK8MaFc6bHeX+syRXGs6pIJb2SLPloAMJEmediDgZ5JLMeWNbVvbw2lukFrDHDDGNqRxqFVR6ADgVS07W7fU9U1awgjlWXSrhLecuAFZmiSUFcE5G2Qdcc5rRoAyfEnh218T6ObC8kmgKyJPBc27bZbeVDlJEPZgfw6g8Gs/RrfxtZanFb6ze6NqmmjIe7SGS3uT8pxmMbkJzjJBUYzxWnpGv2WtQebbFo1aeaGHzsKZ/KYqzoM5K5HB9Oe4pNO8Q2Go6feXySGC2s7me2mkuCEVWhkZHOc4C5U8ntQBqVzfgP8A5F26/wCw1qv/AKcLit6zvLbUbGG8sZ47i2uEEkU0TbldSMggjqMVg+A/+Rduv+w1qv8A6cLigDpKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACsrxF/yC4f8Ar/s//SmOtWsrxF/yC4f+v+z/APSmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKo6zrNh4f0W61XV7hbeztU8yWRhnA+g6knAAHUkCr1cD8UALm88GabOM2t54ig89T0cIjyKp9QWVTj2oAlXxp4tktRqMXw9ujpxXzArajEt4U9fIxjOOdu/PbrxU0mkeDviBoUXiGOEPFNGXF3DuilXGQwYDqykEEMDgjFdnXA/DkfZfFXj3ToOLWHWxPGn915YUeTHtuyce5qoylB3i7CcVJWZxnh7w94c13xxHpMFlryWE2nyX9veXsyQ/aFSSNDti8sOFPmcMxUnHAwQa9G1CTQfht4eM9hph8yeZLe3t7cbprydzhIwzHJJPcnAAJ7VVuP8AkvVh/wBi1c/+lUFReNiZviR8PbR0LQNqF1Mx7B47SQp/M/lWk61WorTk2TGnCPwotab401RPEVno/i3w7/YkupB/sM0V6t1FK6Dc0bMFXY+3JAwQQDg8V2FcF8VWMUfg+VOHXxVYKregZmRvzViPxrvaxLCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDm/iP/wAks8V/9gW8/wDRD10lc38R/wDklniv/sC3n/oh66SgDD8a61c+G/A2s6zYpFJc2FnJPEswJQsqkgEAg4+hFcv40s/GK6DbG613Q5E/tbTQFj0WZCG+3QbTk3R4DYJGOQCMjORZ+MN/c23wx16CDSby8jn02cSXMDwiO3G3q4eRWI5/hVjxXP694U0y/wBOih0v4N/ZplvbWZn+y6UmYo7iN5Uys+fmjV1x0O7B4JoA626uvFujXumNqOq6LeWt1ex20kcGkywPhs8hzcuARj+6a0PGUuqW/hq7udIvLO1MMEjyi6s2uPMG04VQsseGJ4yc9elcFq1jpulXui3mlfCibSrqPU4ds8Fvpkbt1+QMk+cn3wPU122q/wBoazHpIm0+fT7ESm81Bbh4zJGISGji/duwJZ9rcEjajA9cUAeY6foF74u+EWlWl5ow1e4tdIFtYz2thZKLdxH5flO1zK77sorb41jBDAj2h074e2N5qViIfCl5ImmxSWuoj+z9G+W42RMAAVw/BJ3HJGeDyanH9jmw8EObCWSW90+K8nS40G51GAsbONAVWNcF9qgEqcjAyKo3tnZReHfFhudFt4xMZ5LdpPAd6uV8hQGVzxENwP3uhBboaAPYdHthpfgtrXT9Nk0UW0UixRSRW6lTyfM2QExjLEtgY5JyBXG+HdfsNZ0vSvN+MEn9p3sMO60iuNL3+c6jMap9nLZ3HAXk9q6e71+1b4XajqsYuoIbbTZWY3NtLbOCsRPCyKrfQ4we1YF/e6a+m+F/BcV7FPrVld6a09lG372FYCkpdl6quEHJ4+YetAFfS9HudL1TxsbvxprVrb2l0t7cSiGyPmxtaRFpGDWxGf3br8uBhBxnJPd+GbEWGg28cWpXWo27or273UEULRxFRtQJFHGFUAdCuRkj0A4DxObfU/i5BosF0P7P1OKC31oBSVLwmSaG33dA0i7wwPOxcfxCvUlmjeR40kVnjIDqGBK5GRkduKAOQ1RDP8afDo2qy2+jX8oJHKkyWy5/UD8TXZVxlwX/AOF7acDnYPDd0QO2ftNvn+ldTqep2WjaZPqGq3MdraW6F5ZpWwqgf56UAWW3bDswWxxnpmvLfHUvjXU9JsvD2o2Ph+3/ALcvorQeReTzkqMyyZUxJ8uyJgee9ek6Zfx6rpVrfwxzRR3USyok8ZSRQwyAynkHnpXMWr/8JB8VbqdTus/Ddt9lQg8G7nCvJ+KxiMe3mMPWgCUeI7bwkXXx94y0dbq4AeKHYloqLyPlRnZ2Ge5J6dq29L13Tdf0173w7qFnqcSkoJLe4DpvAB2sy52nkZ4yAelJpOqWOsTXstrGVnsrl7KfzFAdWQ5xxztIIYeoYHvV6QiCGSSOIuQC5SMDc5x0GcDJxjmgDz601fXrD4kazd65YaFYWsek6ebydtZfZBCJrzDgtbqGOS2VO0DC/McnHHWfifwjZSagl9dahcSyanezrNpvja3t4HSS6lkQrGL+Pb8jrkbAc5zzzXX3E3jEeJJfENloptEv4bSzTTpCstw4ied8yOpMcCHzsM2ZGwuANxFYUTX1lfanrNp4u1M20sn+nXNlbWhXUL7ASO2sxJCzFV27eWYZ4zneQAbnwv17QZLnXLey1SBZb/UvtNrZ3Otw3920a2sCMzMs0pPzRv1Y4AHQYFaGqeKb7XbOUeGY7y20pOLnW1s5JHK9CLWEKXlb/b2lB1G/GAnhU+JLHxVDpfiHX59Vk/sZbq7jkhgVIp2k2jYY4kO35ZByTnGcCtnxHf6xFq2k6doVxY2sl80vmTXlo9wFCJuwFWSPk+ufwoA5i5n8KnQLPTdLs/Eemy6cfMsLuHw5qBlt5Ocvkw/Puyd4bO/Jz1zW1pfi2+trq10zxbpk9rd3BVIL62gd7S6J6c43Qse6SAYPALdas/YfG/8A0MPh/wD8EM//AMmU/wAF6zf63olxLq5tmurbUbuyZ7WJo0cQzvGGCszEZC5xuPWgCLXNW1K68QReGvDsiW920H2q9v3QOLOEsVXap4aRyG254ARiQcAHnbLw79t+JOo2D654guLbTtNgaVzrE8e65ldznbGypwiA4C4+fp0q9qd9e+EvHepan/YepatZ6vZwJE2nQec0c0JkHluB91WEikMeAQ2SKu+FrU+GtAvdZ8XXFtZahqly19qDySqscBICpFvPBCRqq57kE96AF0rUNR0bxiPDOr3bahBd2r3em3kqgSkRsqyQyYADFfMQhgASCc8jJo+L/D2igalr3jO1g8QJsW203T5LZD5W/CiOIMTmWSQj5+P4RwFpNGuD41+IUPiWzikXQtIs5bWxuZEKfbZpmQySIDyY1WNVDdCSccCq3jrR7ubX9D1XUr3zILfXbJNPtIsqkYZgHkf++55A7BegySaAJtP+E2hQ2OkW1zYaaYLSMfbYY9Nii/tGRRiMzbeGC5LFeQWw3bBZoPgLwZF4n1+0XwtpcnkXEM8Zm02ArFvjB2xtgttypbBAwWOOOkl/4T8K2Piy0tr3wL4fm0/UgY4rqPSYmeK4AZisnyn5WUEhuMFSD1FR6P4D8IHxlr8Z8K6IUgNsYV/s6HEZMZJ2jbxzzxQBd+JOqaHceEdZ8N3niTRdK1HULCSOJNRvkhxvBAYgndtz3APSsr/hav8A1EPh/wD+Fl/9zV6DqEt1BptxLp9sLq6SNmhgLhBI+OFLHgZPeuP0Dwv4z0TT3iTxHobzXM8l1cySaLM7PLIct832pcgcKOB8qqMUAZ2i+ONFfxVeaxr3ifwdZrJZRWsUVl4hS5JKPIxYlkjx98DAz0rq/FniePw5oX2m3jF5fXH7uwtVPNxKRkDPZQAWZugUE1S0PVPEB8cX2h6zd6Zew2unw3RlsrGS3KPJJIqqd00meImPbqKveI9IsHs9R1d7dWv00ya3SdiSUjKliFHQZOMkDJwM9BQBxuoWqWvwP0uXcXmvLzTL65lbrJNNfQSSMfqzHjsMDtXQvruoeKNYitPCU4h0u1mBvtYCB1lKtzbwA8OTjDPyFGQMt93C8RW8N38A9FtrqNZYZl0aOSNxlXU3NsCCO4Ir0T/R9OsDsRILa2j4RFCqiKOgA4AAFAHE/FjVLiHwvqOl2u0rc6Hqc9yCucRR2xGc9vnkj/Ws6Y+IPEWpWfhuF4LeTTbtNTN3c23nRGBVVrdSiOhyZCwHzA/6OSeoz0Pje+t9U+DXiHULJvMt7rw/czQuVKlka3ZgcHkcEcGtWbTrrUdGsUs9ZvtJZI1LPZpAxcbRwfNjcY+gBoA4vwzZ+Lz4v8ZCDXNESVdRgE7Po0zK7fYoMFQLobRtwMEtyCcjOB0XjJtStPAlxcS6tLbyW8DNezabaJ5kq7SG8pZHIQ5OQSxxjr3rnfDPh3U5PF/jJE8Za3E0WowK8iQ2W6YmygO5s25AIBC/KAMAcZyT0vxCjYfDDXY97Sv/AGfIu5m2ljt6kqOCfUD6UAcYmk3MH9h2WoW/i6wFtdxR6bcXB0wQWkgBCDZbvuK7dykHdkHBNSaPY6LpN9qq+K9H1y9uv7YvLqCI6XeXlqEkuHkjeNURot2GB3feB7inXPh/VtO1rQbi+sPIhGqwgv8A8JbqGocnd/yxmjCH65yO1a3hy38R3iatDp95ZaXY/wBsXv8ApKxme4f9++cKwCIQehPmZx05wADqfDt/fanpbXWpWDWBeeUQQSKVcQhyI2dc/KxUA47Z6DpVDwH/AMi7df8AYa1X/wBOFxWzpixxWK28d89+1uTFJPK6s5YdQxUAbvXgVjeA/wDkXbr/ALDWq/8ApwuKAOkooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKyvEX/ILh/6/7P8A9KY61ayvEX/ILh/6/wCz/wDSmOtKfxr1Jn8LNWiiisygooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAK5nx94ZufE/htI9Lmjg1XT7qLUNOllGUWeI5UN7EFlPs34V01FAHnr/ABVktjbabfeENej8Q3KN5WnC3GyZ0+9snzsKDIJbPAIyO1bPgDw3eeHtEupdakjl1jVryTUL9ozlFkfGI1P91VVVH0J71d8T+E7LxTFafaLi8sbuxm860vbGURzQMVKnaSCMFSQQQQfSrmiaU+jaatpLqd9qjBixub91aU57ZVVGB9KAPNZfGe/4qWmvL4W8WfYYtFns2b+wbjd5jTxOBjb0wjc11HjrTb/ULHRNf0O0e4vtFvUvls2GySeIoySxDPR9jkgHuoFdlRQB5zd3V58QvE/h+KDQtV07SNIvRqV3canam2MksasIo0VuW+ZtxOMDaOc16NRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAc38R/+SWeK/8AsC3n/oh66So7m2gvLWW1vIY57eZDHLFKgZJFIwVYHggg4INc/wD8K48Ef9Cb4f8A/BXB/wDE0AXvFWhf8JN4R1TQ/tH2X+0LV7fztm/y9wxnbkZx6ZFa1c3/AMK48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0AO1PQNV1TxFaXM2swppNpcJcpYpZfvWdVIGZi+NuTnGzPbNb1xF9otZYc7fMQrnGcZGK5//hXHgj/oTfD/AP4K4P8A4mj/AIVx4I/6E3w//wCCuD/4mgBdI8J/2VY+F7b7b5v/AAj9kLTd5W3z8RLHuxk7fu5xz1xVrxRpOo65ok+m6dqFvYJdRvBcPNaGcmN1KnZiRNrc8E7h7Gqn/CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNAFzW/Dya1osGlPcNFapNC867QTPHGwbyyewYqAT6ZHeruqWlxf6bLbWl/Np8sgAFzAqs6DPONwIzjIyRxnNY3/CuPBH/Qm+H/8AwVwf/E0f8K48Ef8AQm+H/wDwVwf/ABNADn8EaQPCb6DapJbQs/nLco5M6z7t4n3tkmTcA245z344qXw1oF5ozX9zq2qnVdQvpVeW4EAhUKiBFUICccAknPJYngYAg/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JoAseIPCtrr9xZ3hvL3TtQst4t72xkVJEV8b1+ZWVlO0cMCOAaqWvgPThfQXus3moa/c27B4H1ScOkTD+JYlCxhv9rbn3p//CuPBH/Qm+H/APwVwf8AxNH/AArjwR/0Jvh//wAFcH/xNAHSVT0zSLHR4p49NtxCtxcSXM2GLF5XbczEkk5J/wAOlY//AArjwR/0Jvh//wAFcH/xNH/CuPBH/Qm+H/8AwVwf/E0ATav4K0HW79r69tJEu3QI9xaXUttJIo6BmiZSwHvmrmiaBYeHrV7fTFuBHI+9zcXUtwxOMfekZj0A71m/8K48Ef8AQm+H/wDwVwf/ABNH/CuPBH/Qm+H/APwVwf8AxNAG9d2lvf2c1peQpPbzIUkjcZV1IwQRWUvhPTl1YagDL5kMPkWUQYCKwXbtPkoBtUnuxBPbOOKrf8K48Ef9Cb4f/wDBXB/8TR/wrjwR/wBCb4f/APBXB/8AE0AWtC8NJot5dXs2pX2q311HHFJdXxj3iOPdsQCNEUAF3PTJLEkmm+IPDs+tX+m3VrrN1pMli0h8y0iid3Drtx+9V1A/4CT9Kr/8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E0AH/CL6v/AND34g/78af/APItWfCnh5vDOkTWUl/JqDy3lxdtcSxqjsZZWkO4Lhc/N1AAPYDpVb/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImgDpKq32l2GpiIalY214IX8yIXEKyeW+MblyODgnketYv/AArjwR/0Jvh//wAFcH/xNH/CuPBH/Qm+H/8AwVwf/E0AdIBgYHArK1/RP7cjsE+0eR9jv4LzOzdv8tt23qMZ9e3pVD/hXHgj/oTfD/8A4K4P/iaP+FceCP8AoTfD/wD4K4P/AImgDevEuJbGZLGdLe5aMiKWSPzFRscErkbgD2yM+orI8OaHqGl3GoXms6pFqV7fOhd4LT7PGqou1QF3ufqS1Qf8K48Ef9Cb4f8A/BXB/wDE0f8ACuPBH/Qm+H//AAVwf/E0AdJVLV9Pl1TT2toNSvNMcsCLmyKCRcdhvVlwenIrI/4Vx4I/6E3w/wD+CuD/AOJo/wCFceCP+hN8P/8Agrg/+JoAt+H/AA1BoDXc32281G8vXVri8vXVpJNq7VX5FVQAOgAHUnqa0dQtPt+mXVnv8v7RC8W/Gdu5SM479aw/+FceCP8AoTfD/wD4K4P/AImj/hXHgj/oTfD/AP4K4P8A4mgCd/CtrdeB7bw1fyySww20MPnxHy33RbSki9drBkVh1wR3rNn8Ay3sMttqXjHxJeWc6lJrZ5reNZEPBUtHCrgEccMKt/8ACuPBH/Qm+H//AAVwf/E0f8K48Ef9Cb4f/wDBXB/8TQBf13Qo9X8Hal4fgdbOK8sJbJHWPcIVeMoCFyM4B6ZHSq934e1Cdoza+KtW06OOJY/JtIrQpkDG797A7ZP+9ioP+FceCP8AoTfD/wD4K4P/AImj/hXHgj/oTfD/AP4K4P8A4mgCnaeA7uxvr67tfGviBJ9QlWa5fyrE+Y6xrGDg22B8qKOMdPWti58Pfb/C9xomp6rfXq3CMkl3IIUmKk5x8kap04+709+ap/8ACuPBH/Qm+H//AAVwf/E0f8K48Ef9Cb4f/wDBXB/8TQBb1Lw4uqa5Y6hc6lfCGydZUsEZBA0i7gHb5N5I3dN23gcVRbwZJDd3kuk+Jta0uK8na4ltrY2zxiRuWK+bC7Lk84BAzT/+FceCP+hN8P8A/grg/wDiaP8AhXHgj/oTfD//AIK4P/iaANTRNFttB082lo80u6V5pZp5N8ksjtuZmPqSfoBgAACsvwH/AMi7df8AYa1X/wBOFxR/wrjwR/0Jvh//AMFcH/xNben6bY6RYR2OlWdvY2kWfLt7aJY40ySThVAAyST9TQBZopGYKuWIA9SaWgAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACobtbp4CLGaGGXPDzRGRcfQMv8AOpqKadgMr7P4g/6Cem/+C6T/AOP1m69Brg06LztR09l+22uAtg6nP2iPBz5x4BwSO44yOtdPWV4i/wCQXD/1/wBn/wClMdbU5vnW2/ZGcorlYfZ/EH/QT03/AMF0n/x+j7P4g/6Cem/+C6T/AOP1q0VHtH5fciuVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrRR7R+X3IOVGV9n8Qf9BPTf/BdJ/wDH6Ps/iD/oJ6b/AOC6T/4/WrXC3njjxDL421jw94b8K2+p/wBkx27zXE+q/Zs+cpZQF8pv7p70e0fl9yDlR0v2fxB/0E9N/wDBdJ/8fo+z+IP+gnpv/guk/wDj9UND1bxbeakIte8LWemWm0k3EOri4YN2Gzyl6+ua6Sj2j8vuQcqMr7P4g/6Cem/+C6T/AOP0fZ/EH/QT03/wXSf/AB+tWqOja1p/iHSo9S0e5FzZys6JKFKhijlG4IB4ZSPwo9o/L7kHKiD7P4g/6Cem/wDguk/+P0fZ/EH/AEE9N/8ABdJ/8frVoo9o/L7kHKjK+z+IP+gnpv8A4LpP/j9H2fxB/wBBPTf/AAXSf/H61aKPaPy+5Byoyvs/iD/oJ6b/AOC6T/4/R9n8Qf8AQT03/wAF0n/x+tWij2j8vuQcqMr7P4g/6Cem/wDguk/+P0fZ/EH/AEE9N/8ABdJ/8frm7iXWdY+KOqaNb+I7/SrGy021uI47KG2Ys8jyhiTLE56IvAxW9deIvs3jjTvD32Xd9tsp7v7R5mNnlNGu3bjnPmdcjGO+aPaPy+5Byom+z+IP+gnpv/guk/8Aj9H2fxB/0E9N/wDBdJ/8frVrD0bxTb63r+taTDY39vJo8kccs1zCEinLhsGJsncBt5yB1FHtH5fcg5UT/Z/EH/QT03/wXSf/AB+j7P4g/wCgnpv/AILpP/j9T6XrWn60Ls6Zci4FldSWc5CkbJkOHXkDOCeo4p2ranbaLo15qd++y2s4Xnlb0VRk/jxR7R+X3IOVFb7P4g/6Cem/+C6T/wCP0fZ/EH/QT03/AMF0n/x+jwx/areGrOTxC+7UpkM06bQPKLksIuAPuAhM9TtySTzWrR7R+X3IOVGV9n8Qf9BPTf8AwXSf/H6Ps/iD/oJ6b/4LpP8A4/WrRR7R+X3IOVGV9n8Qf9BPTf8AwXSf/H6Ps/iD/oJ6b/4LpP8A4/VPSdak8UJ4gs4DNpcmmai+nLcwOkjkrHG/mAOhUH95jBDDj34qeFp9Th8W+INI1HWLrVYbJLV4JLuKFXXzFcsP3UaAj5R1FHtH5fcg5Ua/2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVGV9n8Qf8AQT03/wAF0n/x+j7P4g/6Cem/+C6T/wCP1q0Ue0fl9yDlRlfZ/EH/AEE9N/8ABdJ/8fo+z+IP+gnpv/guk/8Aj9atFHtH5fcg5UZX2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVGV9n8Qf8AQT03/wAF0n/x+j7P4g/6Cem/+C6T/wCP1q0Ue0fl9yDlRlfZ/EH/AEE9N/8ABdJ/8fo+z+IP+gnpv/guk/8Aj9atFHtH5fcg5UZX2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVGV9n8Qf8AQT03/wAF0n/x+j7P4g/6Cem/+C6T/wCP1q0Ue0fl9yDlRlfZ/EH/AEE9N/8ABdJ/8fo+z+IP+gnpv/guk/8Aj9atFHtH5fcg5UZX2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVGV9n8Qf8AQT03/wAF0n/x+j7P4g/6Cem/+C6T/wCP1q0Ue0fl9yDlRlfZ/EH/AEE9N/8ABdJ/8fo+z+IP+gnpv/guk/8Aj9atFHtH5fcg5UZX2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVGV9n8Qf8AQT03/wAF0n/x+j7P4g/6Cem/+C6T/wCP1q0Ue0fl9yDlRlfZ/EH/AEE9N/8ABdJ/8fo+z+IP+gnpv/guk/8Aj9atFHtH5fcg5UZX2fxB/wBBPTf/AAXSf/H6Ps/iD/oJ6b/4LpP/AI/WrRR7R+X3IOVHJeLbPXpfCeoRveWVwGix5UNg6u/I4B808/gaoeAdO8YWcaHWroJYY+W3ufnlHpg5+X6En6V3lFarESVJ07LXyI9kufmuFFFFcxqFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVV1Gy+32qQ+Z5e2eGbO3OfLlV8fjtx+NWqKabTuhNXVgooopDCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACvJrbUPENh8bPHP8Awjeg2+sb4NN87z9R+y+ViKTbj9227OT6Yx3zXrNeXR6xN4U+L/jC8vtB167tdSh08W0+n6XNcI5jjcP8yqRwXFAHd+H73W76zlfxFo0GkzrJhIob77SHXA+bdsXHORjHauJ0S48ceLNU8RQReIItH03T9Yntbe4is45riQLjCYYbFVQepDMxJ5GBnptF8cW2t6oljFofiGzZwSJr7SJoIhgZ5dgAPaq/gCyurL/hJvtltNb+f4gu5ovNjK+ZGduHXPVTjgjigCHwhf654h8K6pYalqnkarp2oz6cdTtIEBk8thiQRuGQEqQCMEZzisL4D6bfw/DywvZtburi0ka7RNPeGERxsLqTLhlQOScE4LEfMeOBjo/AFldWX/CTfbLaa38/xBdzRebGV8yM7cOueqnHBHFZnwpabQtAXwjqWnalb3thcXbefJZSC3mRrh3VkmxsOVccZz14oArfDfVfGXitF1PVtRjt9Ls7y6gEa2yGTUSssiglgMRog2KABuYoxJ55vafd+IfG9/qt1pevPoWlWN7LY2q21rFLJctEdskjtIrDbvDABQDgZJ5q98LrK60/4f21vf201rOt5esYpoyjANdzMpwecFSCPUEGsrRLy6+H9zq2kalpGrXllNqE17p93p1k90rpMxkMbhASjK7MMsACMHPWgC1p/ivVLnwL4nN95cOu+Hxc200sKYjeRIt8cyq2cBlZGwc4OR0qhp0PxA1LwLZ+IU8SQpqklil1HposYmtpfkDBJGxv3MOpVlAJ4GBy610nULT4d+NtW1q3Npe64t3em0LAm3j8jy40YjILbEBOO5I7VBoXjLVbb4caZYWvhfVpdb/s2KO1WK3LWsh8sBJDP9xUPBIYhhyMeoBd1Xxtdy+C/C/jTSpDb6VPc276nbuqti3m/dkliMgxuynII4BzxWvq2r6hJ8RtD0DSrjyoVgm1DU/kVi0I/dxpkg43SNnIwcRn3pNJ8EW9r8KbfwZqDieL+zfsU8gH3iUwzD05JI/CsT4Qx3+paTd+Jtc2vfXoislkVtytFbL5e5T6PL5z8cYYUAaGl/8AJb/EX/YFsf8A0ZcVneLotVn+MfhqHRLiG0mk0q9WS5lj8zyo/MgJZV6M3AAzwM5OcYOjpf8AyW/xF/2BbH/0ZcVV8Vtqmn/FLQdZstGu9SsrXTLtLtrZMtGrSQ42jozcZ2ZyVDEZIxQBYtNR1zw14603Qdc1VtbsNaim+yXc1vHFNDPEodo28sKrKybiDtBBUg5q1o+panq3irxtpT37wxWM0ENjJHEm628y0RywypDHexb5sjt04rPhe98Z/EHRtWi0y/0/R9BSeVZdQtmt5Lm4lQxhVjfDBVQuSSBkkYz1q/4Wsrq3+IHji4uLaaKC6vLRoJXjKrMBaRKSpPDAMCDjuCKAOY+D2k6lDc+JLibxDeTwQ+JNQiltXggCXDh8GViIwwYnnCkL7YrqfFX/ABOvEOjeGE5hkk/tHUMdoIWBRD/vy7OO6o9ZXgR5vDniDxFoepadqUcl/rt3qFtdiyka2eKXEgJmUFFI5GGI5HuK1fBA/taTU/Fkgz/bEwW0PpZxZWHHsxLy/wDbX2oAZ8Sta1nRPD+nzeG5IkvrjV7O1VZlBSQSShSjZBwDnBI5Has3XrrxR4Ht7bX9Q8Q/2zpq3MMWpWkllFEIo5HCeZCUAYbWYHa5fIzyOtS/FyS4i8O6NJYwrcXKeIdOaGFn2CRxOu1S3YE4Ge1VfFF/fePdNh8MaboWr2IurmE6ldX9o0EdrCkiyOFY/LI527RsLDknNAFrxp4zjsPFNp4bXxJp/hrzLQ3tzqN5JEGCb9iJEsh2l2IY5IYAL0OeIPCvjWOTxqnhv/hKtP8AFUN1aPc297ayQmWFoyoaOURfLyGBVgF6MMHGas+JbG50j4hWvipNKm1bTptP/s6+itofOmg2yGSOVU6sMu6kLk8g4OKv6Dq11rHiIvYeHpNO0WK2O67v7RraeaYsMKkbYYIFByWAySMdzQBV+Hf/ACEvG/8A2Msv/pNb1a0L/kpniz/rhYf+gSUzwJZXVnqHjBru2mgW48QyzQmWMqJYzBAA656rlSMjjIPpT9C/5KZ4s/64WH/oElAHV0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAFXU7CLVdJvNOuGdYbuB4JGjIDBXUqSM55waNMsItK0mz063Z2htIEgjaQgsVRQoJxjnAq1RQBkeINAbX7eOA6vqWnQgMJUsJETz1YYKsxUsPqpU89av6fYWulabb2GnQJb2ttGsUMSDhFUYAH4VYooAx9U8I+G9cvBda14e0rUbkKEE13ZRyuFHQbmUnHJ4962KKKACiiigBskaTRNHKivG6lWRhkMD1BHcUkMMVtbxwW8aRQxKEjjjUKqKBgAAdAB2p9FAGXrugWviGCyivZJkWzvoL6MxMATJC4dQcg/KSOe+O4rUoooAKKKKAILyytdRs5bTULaG6tpl2yQzxh0cehU8EVV0jw9ougJKmg6RYaYsxBkWytkhDkdM7QM4ya0aKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKAP//Z)

図2　拡張のイメージ

ある符号化レートにおいて500番領域を各基底のみで再構成した場合の符号化性能を図2に示す．青丸はDCT単独での性能である．これまでの実験では，図2にある30番基底のような，画質と情報量がともに改善する基底のみを有効な基底の候補としていたが，50や10番基底のように改悪を含む基底も性能改善に寄与できるのではないかと考えられる．そのため，これらを抽出できる指標を作成する．この処理は領域単位で行っているが，全ての領域でも同様な処理を行った後，全ての領域に対して各基底が画質と情報量をどれだけ改善できるのかを比較する．これにより，ある符号化レートにおいての最適な基底が決定される．例えば，図2では10，30，50番基底が候補の基底となるが，500番領域のほかに501番領域にも10番基底が候補の基底として存在しており，他の領域には候補の基底は存在していなかった．この場合，全ての領域に対する最適な基底の候補は10，30，50番基底である．500番領域の10番基底と501番領域の10番基底 vs 500番領域の30番基底 vs 500番領域の50番基底が改善できる画質と情報量を比較して，30番基底が一番改善できたため，このレートでは30番基底が選出される．上記の処理は，ある1つの符号化レートでの処理であるため，全てのレートに対して適用させる．

図3　性能比較

今回の手法（赤）と前回の手法（オレンジ），基底0個領域のみを使って再構成した場合（青），DCT単独（黄）の4パターンの符号化性能を比較した結果を図4に示している．図3を見ると，今回の手法は，すべての符号化レートにおいて前回の手法よりも性能が悪くなっていることが分かる．対象領域を拡大することで，領域単体としては性能改善に寄与できる領域が増えた半面，画質や情報量の改悪を含んでいたため，基底の付加情報量の負荷を許容できるほどの余裕がなくなってしまい，性能が悪くなってしまったと考えられる．原因としては，付加情報量を考慮せず，DCT単独からの性能改善の可不可を決定してしまったことが挙げられるため，今後の課題とする．

* 2.　ICA領域のみで基底を作成

符号化レートごとにICA領域は変わっており，その符号化レートに適した入力画像固有の特徴がICA領域に含まれている．入力画像をそのまま用いてICA基底を作成した場合，ICA基底にはDCTが得意とする特徴が含まれてしまう．そのため，ICA領域のみで基底を作成することで，より入力画像固有の特徴に特化した基底群を作成できるのではないかと考えた．

・対象レート：Q30，Q70

QR コード

自動的に生成された説明QR コード

自動的に生成された説明

(a)Q30 　(b)Q70

図4　ICA領域

屋外, 建物, 大きい, 座る が含まれている画像

自動的に生成された説明建物, 座る, フロント, 大きい が含まれている画像

自動的に生成された説明窓, 建物, 大きい, 座る が含まれている画像

自動的に生成された説明

(a) 元の基底群 　　　　(b)Q30　　　　　　　　　　　 (c)Q70

図5　作成した基底群の比較

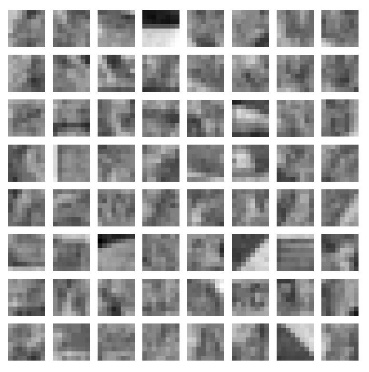
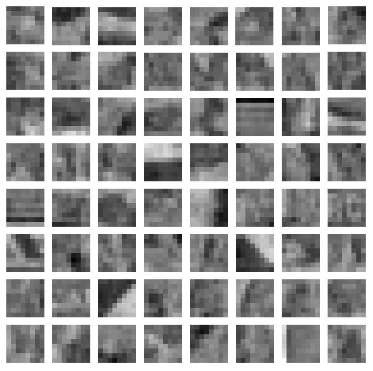
　基底作成に使用した画像を図4に示す．また，元の基底群と図4の画像を使用して作成した基底群を図5に示す．図5(a)(b)を比較すると，両方に存在する基底形状や片方にしか存在しない基底形状があることが分かる．このことから，全ての符号化レートにおいて重要となる特徴や，各符号化レートにのみ重要な特徴などが存在しているのではないかと考えられる．

　次に，作成した基底群は，特定の符号化レートに対して有効なのか，それともICA領域を内包しているレートに対しても有効なのかを確認する．

建物, 写真, 座る, レゴ が含まれている画像

自動的に生成された説明





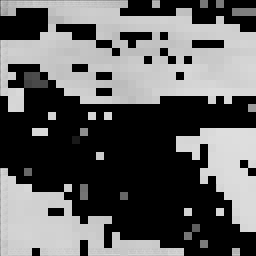
(a) Q10　　　　　 　　 (b) Q20

図6　ICA領域と基底群

表1 数値

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (a)  レートで  基底が異なる | | (b)  Q10の基底のみ | |
|  | PSNR | entropy | PSNR | entropy |
| Q30 | 28.40 | 0.435 | 28.39 | 0.432 |
| Q20 | 27.17 | 0.334 | 27.12 | 0.330 |
| Q10 | 24.88 | 0.219 | 24.88 | 0.219 |

図7　性能比較



(a) 基底変更　　　　　　　　　　　　　　(b) Q10適用

図8　ICA領域（Q20）

　Q10とQ20のICA領域とそれらを使用して作成した基底群を図6に示す．また，Q10~30でそれぞれ作成した基底（図5(b)，図6）を適用させた場合と，図6(a)をQ10~30に適用させた場合の性能比較を図7と表1に，Q20におけるICA領域の比較を図8に示す．符号化性能では，各符号化レートで基底を変更したほうが性能が若干よくなっているが，図8を見ると図8(b)の方がICA領域が多いため，各符号化レートごとに基底を変更したほうが良いと言えるのではないだろうか．

　今回の実験では，基底を使用しない領域もICA領域に含まれていた．次回の実験では，それらの領域を省くことで，より特徴を含んだ基底を作成し，さらなる性能改善を目指したい．

* 今後

・MSEとは異なる評価指標でStep1を行う

・画像サイズや基底サイズを変えて実験してみる

・基底作成からのアプローチを検討

…など

1. 領域：画像中の8×8画素のまとまりを1領域としている．1画像で1024領域 [↑](#footnote-ref-2)
2. ICA領域：同じ画質を表現するとき，ICAの方が少ない基底数で表現できる領域 [↑](#footnote-ref-3)
3. 符号化レート：実験ではDCTのQレート（100~10の10段階）を参考にしている [↑](#footnote-ref-4)