![Uma imagem contendo Texto

Descrição gerada automaticamente](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDaRXhpZgAATU0AKgAAAAgABAE7AAIAAAAFAAAISodpAAQAAAABAAAIUJydAAEAAAAKAAAQyOocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAHVzZXIAAAAFkAMAAgAAABQAABCekAQAAgAAABQAABCykpEAAgAAAAMzMQAAkpIAAgAAAAMzMQAA6hwABwAACAwAAAiSAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAxNjowMjoyMCAwOTo1NjoxNAAyMDE2OjAyOjIwIDA5OjU2OjE0AAAAdQBzAGUAcgAAAP/hCxdodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDE2LTAyLTIwVDA5OjU2OjE0LjMxMTwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT51c2VyPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAJUCtQMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APpGiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKp6rerpumXF4y7xDGz7c43YGcfpQBcopsciSxrJGwZGAKkdxTqACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKOlABRSbh60bhQAtFIWA6mjINAC0UUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUhZR1NAC0Zrjtf+I2maPcta26tf3KfeETAIh9C3r7AGuOuPipr0xIt4bO3HbEZZvzJx+lK6No0Kk9kexUZrxb/hZfiPcP38OCcY8kV6f4T1K41fwxZ3t4ytPKG3lVwOGI6fhQmmFSjOmryNqiiimYhRRmjNABRRRQAUUUUAFFFGRQAUUZFGRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUmaUnA5rjvGPjF9EmSw05Ue8kUMWfkIpz27nik5JK7E2ktTd1nVJdNjR4Lf7Tndujjf8Ae4AzlE/jx3GQcetczqnjHStQ0i7UXoRpLOVPs0ymNg5XGck7T1xweM1yzr4j1fxE9/ZGWR5yUR7aXIjjzwCwICdO+M810ckl1qOsW2nabZRqYJYpNSnUZ8wqyHaZMDdwBnPJ9ODSjLmEpXLGk+JrfTNLtNOhmk1G7QBBBbxFj1PyhiQpAAxkZ4Ga66xnkmt1a4RY5eQ0aPv2H0J9cYrzu48PXul6leW2huyNfRsbba5ieNlYMYy3bjOOQCPpmsHS/Ees6JrV356zrNKjLKsiZxIAdrHtnOOe/vmiUuXcTlZntmaK5Twf4x/4SQzQXEQguoRllU/Kw9R+Y/OuqBzTTuUmmroWiiimMKKKKACiiigAooooAKKKKACiiigAooooAKzvERx4X1Q5xizl5zj+A1o1meJP+RV1X/rym/8AQDQJ7HzeFaRwsaksxwFA5J7cVZOnXu3mzm9D+6arHhxR/wAJTpYdvl+2Q5yOPvivpACt5SsYQjzdT5qOnXqMfLtbgoP4vJI4zjPt/wDXrvPhLBdReIbxriKVF+ykfOGHO5fWvWiuaAMVm53VrFqnZ3uLRVTUNStdLtHur+dIIE6u5/QDufYc1x03xd0COTbFBfTL2dYlUH/vpgf0qUm9jRyS3O8orjdL+KHh7U7mOBnnsnkOFN0gVc+7AkD8T2rsVYMuQQQRkEd6GmtwTT2KOtatBoekzajeBzDDt3CMZbkgcD6msXQviBpXiDVVsLGO6ErqWBkjULx1/irA8e+NNIvNC1PRInkN4JBGVKELlJBu5/A1wvgnWrHQvE0V/qTOsEcbjKIXOSMdAKtR0uZudpWPoIHNFcpp3xG0DVL+Gzs5bhpZnCIGgZQSfqK6rPyk1DVjRNPYWiuY1f4gaBo1z9nuLozzAZZLZfM2+xI4B9s5qrY/FDw5e3EcRmmtmkO0GeLaAfcjOPqeKLMOZXsdjRUcMyTxh4nV0boysCD+IqSkMKKytb8SaX4fjD6rdLDu+6gBZ2+ijJ7dawF+Kvhtm/1lyq5xvMB/l1/SnZsTaR2lFUdL1mw1m28/TbqK4jwCdjcr9R1H41epDCiiigAooooAKKKKACiiigBGNeXfEXxi7zNoulzFEXK3UqEgk/3AfT1/L1r0HXtR/snQ7y+4JghLKD3bsPzxXzwxZ2ZnYMxOSfeplK2h2YWkpPmfQdBC88yw28Zd2OFVBksfYCu40f4X6peKJNUmjsUIyE2+ZJ+IBAH5n6V0vw38ORWOjLqc4DXN4Ny5H3Ezxj3PX8q7gcYpKPcutipX5YaHnR+Etrj/AJCU+cjrECK7bQ9KTRNGg0+JzIsIOGIxnJJ/rWhQehqrJHJOpOatJhmqWo6vYaVD5uoXcVunbe3J+g6n8KwfGvi9fDVokduqy304JjVuVQA8sw/kO/4V4zeX11qV1Jd3szSzSNkuzfoPQe1JysbUcPKorvRHrs/xR8PRSbYjdT+8cOAf++iKSH4p6BIwEq3kA/vPCCB/3ySa8t0/QNU1cj+zrGa4BON4GEH/AAI4A6etSaj4a1rS0zqGmzxp/fVQ6jnuVyBS5mdH1ejfl5tT2/SvEWl60D/Zt7FOw6oDhgP904P6VqZHrXzTFNJbzLNDK8cqnKOjFSD6g1634D8cSa2x03VMfbkXckoGBMvfjpu+nX04pp3MK2GdNXWqO7qG4u7e1hMtzPFDGOryOFA/E1U1zVo9E0a41CZdywpkKDjcegH4kivBtZ1u+1u8a71CYyP/AAL/AAoPRR2/n6027GdGhKrr0Pa5PG/h2MkNq1ucHGVyw/QVF/wnnhvdj+1I/wDv2/8AhXhYBYkLk5GeBQYm5KKxxn+E1PMzr+qQ7nuY8feGuf8Aiax8f9M3/wAKePHXhxjhdViz/ut/hXhIid/m2Nk+3SnIp42KeTgAg5/l9KTkw+qU+59Kg5FLTYxiNR6AU6tDzQooooAKKKKACignFFABRRRQAUUUUAFFFFABRRRQAUGikNAGB4w15tB0GSeF0Fy5CQhl3c9ScZHQfrivJvEM097Lb3tzKzXEkQRsvkvyfmwOnGPy967f4jSJqZXTLZ1+12qi52MQBIv8Sg9mAAPuCcV55qttJbXUWTlWUsj9jg4/Lj6Vzzl73KXQTlWXY1RNeeFZP7On1G+tZ5I1lk+zKrLGSBgHcwLYHXGAO2eaS21XxCdRXT9K1aWfcA6NEdi4ZA5JyOMZOc9wa1YvEekeJIobHxfB9nuUwkeoQnaR2w2enfOcjvxUdvoP/CP+JL22jnW5jm0qeaKVf41ZSAe/Py9vY98Vok3sdt400+aOv4fIXTL7UL3Sr/UNS1fUUfS2U7Y0V2BclRtyRg9c/WszUNPn1Ozn16xvbi7jjYJceamyaI9iQpII56g/Xua09O2TeHPFhuZVhV54SXIYhT5pPRQT19j1rKi1u207wvd6ZYObqa+dfOn8to0jReyhwGYk55wBz7UnZrUaipSdlrdaFDQtWv8ARrqe+0+ba4fyyGGQwwCVI9Onv0r3TRNTTWNGt76IYEy5K/3W6Efgc14HamWSzuIgjFDcFkIGBv2DIz7gD8hXsHw/niTw99gEyyXFo5EwVtwBb5uD3HOM+oNTTk+Zo86orVpJbHV0UUVuAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVmeJjjwnqx9LKbt/sGtOsrxR/yKGsf9eM3/AKAaBPY+eNPvjp+p297GgdraVJVVz94qc/0rvj8ZNQBO3SbXHbMzf4VwmjWa6lrFjaSFkjuLhImZByAWAP6GvUf+FOadxjVLz34Xn9PpW8uXqc8Of7Jk/wDC5b4Lk6Rbn285v8K7nwX4nl8UaTPeXFsls0c5iCI5bI2qc8j3/SudPwc0/wDh1S6H1VTj9K6rwx4ah8L6bJZW87zrJKZS0gAIJUDHH+7WcuW2hrHnv7x5D491y61jxNeQtOzWttM0UUQbKrtOCcepOefwrotC+Ehu9NjudZvZreWQZ8iJBlBnjJOecY7ce9a/ivxH4U0K8miOi2l/qIcGVfIRQGPOWcqecHtmsE/GPUA2BplqPRdzEiqvK2hFop3kZfjP4fzeGIUvLa4+02TEISy4dGOevqOOvvXT/CXXJplu9HuJXmSFFlgLfwjoy/TJXH41y/iP4i33iPSH06eyhgR3Ulo2bdwc+tX/AIPjPiq6Ynn7GwwP99Kbvy+8JWU/dLfjfwCLC01TxB/aPmF5/NMH2fGN8nQNu7bhzjt71x/hfw9/wkevLp4uvs+5GcSeWXxgZ6ZH869g+JR2/D/UMEjmLp/10WvOvhYc+OY8/wDPCTH6URk+UJRXOjqdH+FTaTrdpfnWBMLaQSbPs23djtnecfWl+KfiGfTraDSrGUxSXSl5nUkHZ0C59yDn6e9ein7teKfFYufGfU4FtHjH1apjeUtS5rljoV/CHgOfxTBJdy3H2SzU7VcR7jI3fAyMAcc1p+JPhXJpWmSX+m3j3Yh+eSJ0w20dSDnBx6Y9fpVHQPiVdaBo8Omx6fDOsTOdzSEMcsW5/OtGb4vXc1u8b6PDh125E7d/+A+n86p81yFyWKXw08SS6brselTSsbO7YoAzZCSY+Ur9Tx75HpXqXinWf7C8M3eoAAvGoCA9CxIA/U14LoYc+INO4yftcJ6f7Y5r2D4oAjwLPgkfvY//AEKpklzIqEnys8ksLPVfFeuiFXa6vJss0kznAA6knsB/gK7Of4P3i2ReDVYZLkDiNoSqE/72Sf0qD4QIp8SXjEZZbTgnnq6/4V7DinOTTshU4Jxuz50tLrUPCuveZbs9vdW0nlyo3IJ/iU44I/8A1+le/wCj6guq6PaXyLsFxCsm30yOlc7qvw20bWNVmv7mW8SWZtziKUAZxjupPb1ro9K06PSdMt7GBmaO3jCKzkFiB64FTKSZcIuJcoooqDQKKKKACiiigAooooA5f4ikjwPfbev7v/0YteIR4a4VZOFLDP0r33xdYPqfhW/tYgTIYt6qBncVO4D8SMV4CMhgencY4rOW56eE1ptH0pBGsUKRxgKiqAoHQDtUlc74K19Nf8Owyu+65hAiuAcAhwOuPfr+NdEOlaHnSTTswqK5njt7WWaZgscaF3J7ADJqU9K5vx3dm08F6gwyTIgi/wC+iAf0JpMIrmkkeNazq9xrWqTX122ZJD8q/wBxeyj2A/rXXfD/AMFx6qDqmqoWtVbEMR6SkHkn2HT35/Hgj8zDtxjAFfQ+h6eul6HaWSgDyYlVsDq2OT+eaiOrPSxM/ZwUY9S/HGsSKkahVUYCqMAU4jIxRRWh5ZwXjvwVa3enz6lptusd3CPMkRBgSqPvceuOc98V5PFNJb3KTRSMskbh0fPIIORX0mwyDXgHivTo9K8VX1rAoWNZcoB0AYBgP/HqiXc9HCVHK8JHc+NNVfVfhjp16nH2qWPzQPXa2R/30K8vQgSDeSU43D2r0fwVaL4j8BalokjbHhm3Rs3IUkBl/DcDn2rhNT0i90e9+y6hA0MuMgH+IcjcD3HBpPXU2ocsW6fW579pQshp8B0xYhasgMflDAIxxV6vnjR9f1PQ5vM026aIZyY85Rs+q9D9a6/T/i1eRDGqafHOP78DFD+RyD+lVzI454WottT1iiuW0j4g+H9WaOJbv7NcSHAhuBtJP16frXTg56VRyuLi7NDqKKKBBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUhpaQ0AeV/ED7RpnjKC/t3MLSIPLkQ4JYDBB/IfnXD3cr3Fyj7BkAIFTOOAB/Su98eXElj4tAYv9muYIzIExzhjjGeN3Bwfw7muQsJTdeKLVlxKzEfdToSBzj24/KuV39oKjJRrJ+Ymoa1b6nfyXl9o6rO5yws7ryQxz/EGR8nHcYzjpWloWoSahqtxJcKqCHSZreKJWyEjVDhcnk98n1PaqviaGQ3kVx5QRWXy8hcZKjJOPoRz3xT/CDbdUvMd9OuB6/wjtWqb5rHrzhTlQc1277CprcNno+raZJbTSPfSgmVHUKu19w7ZPPX9MVhQxSTRsURnMabnCjOAOp+nNPvjuvp8c/vG5/E12nh22GmeHZZ7qAymVGmKiM5AA6HIxjB3c8fMOtR8RtzRw8FJbuxyGmXk0EN7bBnMVwOUVjjI2nOPoMZ9Ca774WJILrUpAv7ohV3Y75PH5VwulS25tbiK5gDfvi4lViG5UAqCP8AdGPQ59TXoHwzupZ7y/iSNIrSGNFSNOictj69Tz9KmH8Q8Grb2zd+rPRRRQKK6igooooAKKKKACiiigAooooAKKKKACiiigArK8UHHhDWCOosZv8A0A1q1Q161lvvDuo2luu6We1ljRc4yzKQBk/WgT2Pn3wwv/FWaTnGDew/+hivpEV4roPw98SWXiPTrm508JDDcxySP50ZwAwJ4DZ6V7UK0m09jOmmlqFMfhTT6QjIrM1Pmhn+3az5t+5BnnHnSE8gFuT/ADr3208PeHrOxHkabYiHb/rGiVtw9Sx6/ia4Dxf8Mr9tQuL/AEELPFNIXNsCFdCeTgk4Iz24PPeubt/Aniu6xbLp80aA5IllVVUHvgn+QrV2ktzBXi3odH8QtZ8Ltpb6Zo1tbPd71JmtoFCpg8jeB147VU+EKj/hKroj/nzYD/vtKluvhJqFposk0Nwb3USVCW8RVI1GfmOWxnj6VpfDfwpreheIJ7nVLE28L2zIrGRGy29T2J9DRdKOgJSc7s6f4jRSS+AtQWJdxARiB6B1JP5CvLfh5qVrp3jG3mvJBFG6NH5jHAViOM+g7fjXutxbx3VtJBOgeORSjqehBGCK8h1z4T6nBM76NJHeQknajMEkUehJ4P14+lKLVrMqcXdSR64l3BIilJ42DcKQwIP0rx74s27x+LYZWGUmtl2kezEEfqPzqLw54F8Q6f4o064u9KaOOG4SR5PMQ7QDyeCfevTPFvhWDxTpYgdvJuIjuhmxnae4Pse9JWjIbvOJg/DeLRdU8JQxy2lnPd2zOsu+JWYAsSDyM4wQM+1dDq1h4f0zTLi/udLsNkMZY7rdPmx0HTuePxryK+8A+J9ImLR2ck+0fLNaNuz9MfMPy/Ooo/CfivVZEWWwvpOeDckqqn1+Y8VXKm73J5mlax0eieNodQ1yys4PCGmxySzKN0ZG5AerD5Ow5+gNdZ8TIjJ4FuSBnZJGxx2+YD+tUvA3w9fw/d/2jqsqS3YQpHHHysWTycnqccewzXb3dpFeWc1tcRiSKZCjo3RgeoqG0noVFNx1PGPhbqNvp/ix0upEiS5tzHG7kAb8qduffB/Kva2kVFZmYKqjJJ6AV4t4g+F+r6dI0mlA6hASSCuPNX6qev4flWEug+JZQLY6XqbLkYjaB9g/MYFW0pO9yItwVrG/r3xI1xdfu10jVAtishWHbDGwKjjOSuecZr1Xwzc3V54Z0+5v333MtujyMQBuJGc4AAH5V5p4Y+F2oS30Vxr6C3tUIYwFwzyY5wccAH659q9ejjWKNUQBVUAADoBUytsi4c27HUUUVBoFFFBoAKKKKACiiigBGGa8P8ceF5fD2rNNAhOn3LFomxwh6lOvbt04+le41WvrC11G0e2vYFmhcYZGH+cfWk1c2o1XSlc+fdE17UNAvhdadNsJ+/GR8sg9GHp+or1bSPibot5An9oStYz4+ZZFLLn2YDp9cVzGt/Cy+tZN+hyfa4MH93KwWQe2eAf0ri77Tb3TpjFqFpNbSdMSIVB+hPXp2qdUd8o0a6unZnuH/Cc+GyP+QvB0zj5v8K5vx54p0fUvCs1tp9/HPM0iHauc4ByT0ryYkHABGR05yaeCNxAwSOozSchRwkIyUlImsmQX0HnMBH5q7y3QLnnpXug8b+Gu2rQfr/hXgbZH5ZpWxxjnnsDxQnY1rUY1LXdj3weOPDZ6avb/AK/4VrWV/balaJc2MyzQvna69Dg4P6ivm04XJ49R9K9v+HDf8UNZE4AzJgjv+8aqUrnDXoKlG9zqj0NeD+NrhLrxlqboQVEoTPuqhf6V6j408WW2gabJDHJuv5kKxRqeUyPvH0xnNeIktI2WbJ6kk8n8aU2a4ODTc2enfCKCQW2pXBz5btGgPbIDE/owru9T0ix1e38jULWO4TORuHKn1B6g/SsvwPpR0fwpawSrsmkBlkUjBBbnB+gwPwroNw9apLQ5K0+ao5I861b4UQSs8ujXjQHB2wzDeufTdnI/HNcZqfgbxDpyky6fJMnXfb/vP0HP6V7xmkIB60uVGkMVUj1ufNLKyMVccdwRzXc+B/HNxY30dhrF4z2Mg2o8pyYT259O35dMV0/xH0PT5PD0+peSkd1AynzVGC+WAIPrwf0rx8Z3YHHGM1Pws7ouOIhqj6ZBz0orP0OR5PD+nyPnc1tGzZ9SorQrQ8l6BRRRQIKKKKACiiigAooooAKKKKACiiigAooooAKgvLqKytJLm5cRxRKXdj2Aqeua8f2U1/4RuI7cyl1ZW8uJGcy88LheepH5UDik2kzgvFviB/FN80dhHbi3tnPkyPkSyYGWIOcAcdCOw9cVzr6iYRa4t44pYZS8gYffyOf09s1XubG+08xm+srq1Lfc85Hj3H2yBmks5ovNK3LvHOMMk+7Gwg5zwOv4+v4cr1ldnoywtO3NFnfxbJrzzwUkt5STg4DSqyrhh1Ocqp568nvisR5NM0vVLu5S4OnxywNFskgdlO5QXI/u4zgDmsWx1S78NvOEh4mj4ZlHy9wdrAjuDyD17VJdayNZX7GstrG+N5kmQRiMgE7VVBwDyMnrx0rVSTMfZTSdnobuheHYr++lu7d3v48efDJ5bRBzvPy4PP8AARnpz0OK2vEV/FpGlurxssjjEYROFcYwA2Ox988AY445G08Wvb6a9ilzcjy4/wB0kMiZRh/ECqjjJOVYMPcEZrIuLq91m6in1GdmXGxXk74x3A6DI/OhtJWRXs6k5Lmew77MUJihPmXTkb2QfIuTzknvk49BXZ/D/XYdIvf7OvUjgju2ASXBBDg4CNzgD04HJ964yS5VIfItSRnhjnn6ZHUdxxxVdnQSKs06o7HG6WUDB9c5rOGjNfqlPlcn959JKc9KWqmlxzxaXbR3komuEhRZZF6OwHJ/OrddJ5gUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUmOc0tFABRQKKADFIaWg0AUtS1Wz0e0NzqM6QRDjLdz6AdSfYVR0vxXpmr3htLWV0uAu/ypomjYr6jPWsvx/BYzWFl9u1CTT5Fula2uBHuRZMYG7tjryaxzrt7Dqjw3q6ZqV9b2E0lvfWWWeIhCfm7c46DA5FS3Y1jBSj5novB70DArzHR765tZvD1zHrt1qEupNtureWfzFTI6hf4cc/lSWK6rD4Hl199dvZJJozAkcjkrCDMql+vJAB57A0cweydtz0/d6Yo3V55HdXWh313DYa3Pq0f9lyXJ86US+XIvQg84B9P51HpVxJp9zZ3B8WTXJubF5pradjNhghbK4GAAR04zjv2d0L2b3uejkjFVbG/ttStRcWknmRFmUNtK8qSDwfcGvONB1O/TXtKaTUtRn+1lllW6lQxyAjIZY1Yle3X/EVDYNd2nh9NUttfmDxXeF05cBeZcEFc55BLfj7ZpcyL9i+rPV9w70oNeTa9rV9/aOqXNtq2ohra4McKxFUt0wTlSC2WP4GvUNOuGutOtp3ADSwq5A9SAaaaZEqbik2WqKKKZmFFFFABRRRQAUUUUAFFFFACYpDGp6jPtTqKAIDZ2+MCGMDOfuCuP8AiZawxeC5mihjVvOj5VAD19q7c1x/xMOPBsmRkecnH40pbGlL40eQaMqnX9PWQbka5iDAjqN4r6FOn2Z62sJ+sY/wr580ZA+vaeh4DXMYPAP8Q9a+jOtTE68Zujwm98Xa3DeTxLcwqqSMoUWcJAwT/sVE3jnxI0JhGqNGnpFFGmPoVUEfhXW6r4D0C0vGOp+Jo7SSVi4SZo0PJzxk5qxH8JLCWJZItXlZHG5WWNSCD3BzRZlKrh+34Hlss0s8plnkeSRzlmkOWP1Jp1tO0FwkqbfMQ7hlQwyDxkHg/jXqZ+ENoeuqzZ/64r/jSH4Q2h5/tWYH2hX/ABpcrNfrVK1jkP8AhY3idTj+0VxnoYI/8KcfiT4nzj7ZGPTEKf4V1Z+D9rk41eYZ/wCmC/40g+ENuAQNYl/78D/GnZmftMN2/A5f/hZHibjN6g5/54J/hSH4k+JeF+2J9fIT/Cupb4QQH7usSD/tgP8A4qgfCGEEbtXdsdc245/8eo94PaYbt+BwWseJtZ1xAmo3ryxA5EagIv1wAM/jml8NaBL4i1uKzRX8k/NNIB9xR1P49B9a9CtvhFp6OputTuZlHVURUz/Ou103R7DSLfyNNtYrePvsXlvcnqT7mlyu+pMsTCMeWmizDAkEKRRDaiKFUDsB0FSUUVoeeFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABSEZ60tFAENxaw3UDRXEayxsMMjrkH8K891T4Vo8rNpN0qRtkiKYt8voNwzx+FekUhGalxT3A8R1jw/faDAsV/eWN7KWP7hJd0q5UANtIBIyF6eg4wTWMk32V4YJppoV3fNE/ZSMk7T7+1fQEdlbxSyyRQxxyTHdI6IAXPTJPfoKlMSsCGAIPYip9mjqhiZRVpK58+rM1+rQwNd3m0uTFBlgAANrbAD/tf/Wrf0TwbdeIYNyXtlaxtgyQRyF5FwSNxX+E9e4r2QRgDAwB7Cq66dapfm9SCNbkqVMqrhmHoT36D8qOQU8TJ6RVjktM+F+i2jB7wzXbA9Hbap+oHX8TXW2umWVjCYrK1ht4z1WKNVB/IVaoq0kjnu7WEAx0paKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACo5LiKJlWWRELnagZgNx9B61JXH+MZy2v+HbW2fdcfbhK0SnnywOWI9AaBM68HIpc8ZrzS18Tao0Pnpr8Vxcz21w81mYFxYFVJViFBcAEBfmznNQr4p1mDRbzZqn25/3Aa42QyRwhyQzBl4A4+64GO+RTsFz02GeOePfC6yJkjcrZGR16Uz7Zbm4+ziePzsZ8veN35da5/wAD3Uk+hzRNPDcRW87RQyQqgBTapx8g2EgkjK8fjmuT0WXQh4d0+C7Vzrcd+PMitEj+1GUOeSGH3cYyfTNFguep0GuAutX12HStQ1D+1gIft7WUS+RGPs6+eV8wsSASB8vPHQnvmkfFOtSaakZ1SCP/AE2SFbqMxCSRVQEDLnysgkg88gDHeiwXPRbq0gvbd4LqJJopBhkdcgj6VUsPD+l6XvOnWFvblxhmRBlh6E1wkninUpRCT4khsEOnfaFea3jBnkDyDAySOQo6Eg9V61NeeLNXNxJKt9DZPbwWsiae8QJu2kALAE4bgnb8vtRYObodha+H9G0q5a7tLC1tpcHMioFwO/PaprbT9POlmzt4ITYsGHlKAUIJJP6mue8dMom0L7aAdON8PtfmD93jHG/tjOevFYsOrRafe6udCC2EDTwRG4TZJaxbyFMihVAyByQTgGiwOTO50/w/pelFzp1lBbtIMOyJyw9CfSm2fhrR7CR5LLTraF3UoWWMfdPUew9hXLw67rU+pJpVvqlvI3214Bfm3BDqIN+NoYDIPHBqpL4o1ZtPtVTW4ItRkklgWE267ZCkjL5rMT8gwOnscA9iwcx19r4U0SxnSe0023iljbckip8yn2PX8Kji8JaB9oS4i0y1EsT5DKnRs5yfU59a5rxD4v1PSbvEF3DMlnDC0oEcYS4ZxzktIGAPUbAevOahm8Q39hdS2mmlIjearcq02xCy7FQ4AZlUk5xlmzjsaOUOd3Oun8JaJc3UtzPptu80py7lep9fr71q28EdtCkMKhI41Coo6KBwBXAal4x1iHTLG7imtoz9ka4nVFSXcQ2OhkHyHH8BYgnFd1ptybzTre5JBM0SvlQQORnjPPfvRYfM3uWqKKKQBRRRQAUUUUAFFFFABRRRQAUUUUAB6VxvxPIHgyTdjmaPr9a7I9K4z4n/APInvnp58f8AWplsaUv4iPJ9DJbxDpwBBBu4h/4+K+imr520Eg+I9NAHW7jzyf74r6J7c0ROvGbo4fwZo2janpM19qFpa3upXM0n29riNZHWTcRsIP3QAANvFZuo+ItffVNSg8P2t+qabJ9nt4LS0heBioBxIWYOM54CYAGOtTT32k3ytrGq+Fo1sZLk2zX0coMjHzPLyyKASN3HBY81t/ZPB2rau1qp0+41CJQkkMUw8zCcYZVOTjpz0qjgMO41zxDd3viY2+oLYJokEdwsBtkcuTEXKMT2+U9OeRzxgu0q51LWvG+n3i6hLapPosV01usSsgBcZQZ9SM569Oa6kReH3tbu7U2Zh1MiC4mEg23B5jCE55PJXFZizeHku559RgtdPTQ51s7e4kn2DAjRwO3977vPSgDHtdb8RyaLYXs2pQh9WuxYxIbZQtth3BkJ6sxCYA4GSPx6DRb3UbXxRdaHqV7/AGiFtUuo7gwrG67nZSjBeD0yDgVettO0TVNAS2tIrW60x/mQRtvQnduyCO+ecjnNYnhTULW4d5vD+gSxWE8xjkvZZ13uVyMlSxcjIwAeeegoA7OiqH9t6WNSGnHUbX7d/wA+3nL5nTP3c56VK+p2McdxJJeQKlqcTs0qgRHGfmOfl4IPPrQBaorLm8T6FbzNDPrOnxSqASj3SBhkAjgn3H51OutaW+ofYU1G1a8/59xMpk/75zntQBdooooAKKKKACiiigAooooAKKKKAMfxVrsfhvw7c6nInmGIBUjzjezEAD8z+lcHB4q8cm1stWddIkt77DJYs4jdYz0fLMMA465br07V3Hi/QP8AhJfDVxpyuqSPho2YnAYHIzjnB5H4151feF/E+q6PY6TdeGbYTWkK2qaq98pxGvT5Ac/oevQUAdN4k8bXsWrWOg+GbeGbVL1FcyyvuiiU89vvEAE56AeucVTtvFniTTNefw94mSyF5dQsbG7hU+W0hB2Ag4yMjHY8D1pmo+B9U0W/0fW/DcUd5d6bbpbyWryBPNAUruBPHIOMcdM+1OsvD2v+JvGdrrnifTo9NgsEHkW4nWQu4OQeM8ZOe3Qcd6YC2XxFuW+G19rF4sK6naSm3MZUhS5I25XOejZPP8Jqjd+M/FtneaRYSyaRb3d/afaHN3GyRxZLkAkNxhVGevJpNU+HuqXPxCLwQ/8AEkuLqO8nIkUIHUEkFM5JJLDOMfPVrx74a1fU/F+n6jZ6EmsW1vbbJI2uEiVmy3BywPGQeKQDdZ8YeKNMl0Gwil0S4vdSZ0aaNZHhz5gVdpDA9Dzweapj4n61FoWs/a7WzGpabNHGHRWaJ8yFDkbs9Rwc856CotY8E6vri+HIhoI062gMsd1BBcowt0aUHOS3zHGW4z1qKDwh4kt/BGraCuhL5zXEbxXEU0Q+0qH6E7hjA5GfXp6sDb8MfEq41nw9q8l7Fbw6nYWkl1EqKQkqhSQcFieCADz3FJL8S7uDwdpNyLSK51zVTIsNvEGEY2yFM4yT6cZ5OeRWVL8O9YbwLYSW1s1trlmk0TW4mTMsUjtld2dvRj36MRUv/CB60vhbQ7y3gEWs6QzkWryriQecXAz93PQ9cc0AakXi3xL4e8QWFj4zt7I2t+wWO5tCwETEgYOfQkZHoc5Ndf4q1OfRfDF9qNosbTW8W9BICVJyByAQe9cLe6V4n8eazp39taMujafYv5j7rgO0hOCQMfTHTjJ5PSuz8Y2NzqXg3UbOzhM1zNDtSNWALHI6EkD86QHFL8RfE2jw2Oo+J9ItDpN6qtHNZ5DAMNw4LnnHODjPPNaus+NNXufEy6D4Ms7e5uFjWWa4uSTHGrAHOFI4wynPPXGKwLnw94v8TaLpPh+90ldLsLJUV7l7hGLbV2Z2rk5xkjjGTz76d1oWu+EvFsmteHdN/tW1urdYZ7cThGQqFGRnr90HgHqeBQBpeD/Gmo6nr1zoHiWxis9UtlLfuSdjgY7EnsQRycjPTFO+Ifi7UvC8mmJpMVpI94zq32pWIGNuMEMMfeqj4U0HXbzxxdeK/EFoli0qeXFbebuZRgKDwPQdyDk9sYpfiloOp63NpD6bpr6gluZDNEsipwdmASSOuD0oAbqPjXX9F8ItqGqw6VJdzXYt7c2srNEo27iX5PPB7+nSrEes+OToU89taaLqV0twqxtZy7oniKks3zOOQdvcfSs+C0v7XwhLZ23w+jjga8zPp8t95xddg/eKxHByAOOmKk+HfhzUtM1DV72bTG0u0vAFis5LjzGGDwemeAe+Dz7UAL4P8beJNdM2oanp9jHo1vHIZbmEFWV1XdjBcnp7Ungr4ial4g8QR2OrWltbx3ULvbPCGBYoSCDknsG9OlZ2m6F4i074U3+krpU3228uioj8xd3llV3H0AwpHXvUEvg3xZ4dOjX1uyauNLl/dWlqqoyq3LjdtGQcYycn5qANa68c+KH8SarY6NotrfxabIQwUlZNmcZ+9yfoPwq8vxR05vBsmtC3b7RHKIGtDJg+YRkANjlcZOcdulYtrF4q0Xxjrmoab4Zlu/7Qb92z3CIqc5zz169OKrD4Wan/AMINPA7RtqUk63KwrJ8qgIV2ZxjPzE56ZAGcc0AaB+IfibSfst94l0GGHSr0jy3gJ3qDzzknJxzghc4r02KRJY1eNgyMoZWByCPWvKdYi8W+MdJtNBn8OyWAhkQz3k042ttGM9PfPy5r1KxtVsrGC2T7sMaxr9AMCgCeiiigAooooAKKKKAA0gzjmlooAKKKKACkKKTkjn1paKAGCJFJKqAWOSR3NIsEaAhI1UMckAdTUlFADY40jQJGgRVGAoGAKYLaFZjMsSCUrtLhfmI9M1LRQBGbeFomjaJTG+dyEcNnrkd81G9haSW4t3tYWhXGIigKjHTjpViigDNbQ7J9Te8ki8wvAkBicAoFViwwMdck1bksraaaOaa3jkliOY3ZASh9Qe1T0UAMkhjljKSorowwVYZBFQx6fZxWZtIrSFLYggwrGAhB6/L0qzRQBVg02yto4Y7a0hiSAkxKkYUR5znaB0zk9PWoZdB0mfAn0uzkCggB4FOMnJ7dzz9a0KKAKL6Npkm3zNPtm2xiFSYl4QdF+nt0p0+k6fc28sFxY28sMzmSSN4wVdv7xHr71cooApXOjaZeLAt3p9tOtv8A6kSRKwj7fLkcdB+VXFVVACgAAYGKWigAooooAKKKKACiiigAooooAKKKKACiiigAPSuV+IWnXmp+FXt9Pt3uJfNRtqdcCuqopPUqMuWSaPD9D8Ia5D4i06ebTLmOOO6id2ZOFAYEmvbzS4ooLqVZVGmzjPDXhLbY29xq32xbiK6mnW1a4bylbzWKNszjOMN355rCltPEmpeJdIlvdO1ANZakzzHbCttHHuODHj5zleST9O9eoUUzI8uWy1mLR7fw4NAus2mrLP8AalK+S0Xn79w5znnpjsT7Vf1OHXbC81G4tLK4MM+rrI8lvCks6xeQq741fK/eGM4PfivQcCjFAHK+AbS7s9O1Nby3uYPM1GSaJblFV2RlUgkIAoJOcgDrmsS2hu5fEVrN4Z0LVNDlkud+o/alVbaSPncdoYgueMFcH3r0YDHSkxQB5X/Zt9/wj58OSeH7ttYN75w1LyR5W4zbxP5ufvbe3XjFWtct9TtT4r0yLR766OrMsttNBHuiIKANk9iMHjqe3WvSsDNG0GgDy+e2F3qlnDq/hu6+xWkUW9odN8x7yQIBl3HIReBt6nHpxUckWq3viG3eXSbu3nh1pJSLfT0SEQ+YAZTLgsxZTzhvXIr1TaKNooAWiiigAooooAKKKKACiiigAooooAKTANLRQAEAjBGaAAOlFFAHP+MPFMfhHSY7+a2a4WScQhFcLglWOf8Ax2svQPiLZ6zrH9l3tjc6XeuMwxXS483rwMgc8d+vaqXxjhkn8I2yQxSTML5CVRSTjy5PT6/rWXcXk/jrx/oVzpOmXkFppb+ZPcXEYjyNwOPf7vTqcnjrQBqz/E8x6ve2Fr4ev7w2dw0DyQAsAQxXJwOM4NdhrWq2+h6Lc6leEiG3Qs2Op7AD3JIH4141EILTxlrsl/e69YF9UkeMacCElXzX+969Rj8a9Y8YvZp4Tvf7Ts57y1ZQskNupLkEjkY6Y657YoAw/DnxFbxDq8NrFoN7DaTsyxXp+ZMqpPPAA6epPIrM8WeLbXTPHEdjPe6qiqYTItrOiRIpIJDArnoQSQRwa5nRrlbXxdpq+AZtSFuzBtQs7vPlwpkbiegPGeeTkcHnFQGw8Q67pev6jBoQuYdSlMj3LyBZIljbcAqkg4A46c8elMD1rxR4qsfCmmrdXoeWSU7YIIxl5Tx09ByOf/rCsjw/8SrHWNVGm6jY3Ok3jkeSl0MCXPQA4GD7Ec9q42fUb69t/Cviy5s5ruLTCbe+jRNzIytjzP8AgQw3bkDmrWp6ivj/AMdaBN4cs7l7fTpke4uWj2BB5isQT7BDj1J4oA9G8Ua/H4Z0KTU5YHnVHVNiNgnccVh+G/iRp3iHU00+W1uNPupEDwLcAYmH+yfwz70nxXRn8AzKilj58XA6/erkrPwve6TocPi3W9Se6ltdOQadbIuPKZlxGp9l39B3yaQHXaV8RbDVPFraGlrLE3myxR3DMuyRk64+oGfxFadj4qhv/GWoeHltpUmsYhIZWI2uDt6Ac/xjrXko0/WtE8K6JfN4dNvHYXQvTfLcozTByCAUHzLwFHfpzW/H4gs/DnxR1HWtU82PTtUtEa1nWEkOpWM9Ov8ACQe4IoA6ZfiRZNpuuXYsLj/iTTLFJHuXMu5ygK8+o710dvrVpL4fh1meQW1pJAs5aZgNikZ5P4149aW1zL8P/GOqPbyxwX91C8DSKRvHn5JH/fQ56Vq3Oox+MPh5b+HNCSaTUbK2hleJ49iyCParAE8E5Ix0zigDch+L2lS3yrJYXkGntKYlv3UbPTOB2/X1FegRMksSvGQyMNykcgg968fvfGOm3/w7h8MWlpcNrJhit/sgtzlXUrlv0yO/Ir0vwlplxo/hPTrC9cvcQQhXy27B67c+gzj8KANfaPSjApaKAE2j0paKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigBMc5oIpaKAEC4oIzS0UAN2ClxxS0UAN2DFKFx0paKAEIyKNtLRQAm2jb6cUtFADfLFLtpaKAG7Pc04DAoooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA//9k=)

**Faculdade de Tecnologia de Sorocaba**

**Tecnologia em Análise e Desenvolvimento de Sistemas**

**FRAMEWORKS**

Prof.º Denilce Almeida de Oliveira Veloso

Disciplina: Programação para WEB

Lucas Tadeu Ribeiro 0030482111021

**Sorocaba**

**Agosto/2022**

1. **INTRODUÇÃO**

Frameworks estão se tornando cada vez mais comuns no universo digital. Hoje em dia encontramos o conceito de framework sendo utilizado até no mundo empresarial, mas é na programação que a ideia se origina e populariza.

1. **DEFINIÇÃO**

Frameworks são estruturas compostas por um conjunto de códigos genéricos que permite o desenvolvimento de sistemas e aplicações. Um framework funciona como uma espécie de template ou modelo que, quando utilizado, oferece certos artifícios e elementos estruturais básicos para a criação de alguma aplicação ou software.

Por serem uma espécie de “fundação” sobre a qual um projeto pode ser construído, possibilitam que ele não precise ser iniciado totalmente do zero pelos desenvolvedores. Isso é possível porque os frameworks oferecem componentes pré-prontos e soluções personalizáveis, agilizando o processo de desenvolvimento.

Esse conjunto de ferramentas de programação — que inclui código fonte, compiladores, bibliotecas, classes abstratas, APIs e ainda outros elementos — oferece o suporte necessário para a programação de softwares em geral. Não importa se for no desenvolvimento web, mobile ou de ciência de dados (*Data Science*).

1. **VANTAGENS DA UTILIZAÇÃO DE FRAMEWORKS**

A principal função de um framework é facilitar o processo de desenvolvimento de um software ou aplicação. Ao oferecerem uma estrutura básica sobre a qual o sistema pode ser programado, os frameworks representam uma vantagem em termos de tempo e segurança.

Como são criados por equipes de desenvolvedores experientes e por contarem com comunidades ativas, os frameworks — muitos dos quais são de código aberto — tendem a passar por testes e processos de otimização com certa regularidade.

As funcionalidades de um framework permitem que os desenvolvedores se dediquem às particularidades do projeto sem precisar se preocupar com os elementos básicos da sua estrutura. Por não precisarem começar tudo do zero, os programadores economizam tempo e dinheiro, além de diminuírem os riscos de erro.

Por isso, alguns dos principais motivos pelos quais frameworks são amplamente utilizados no mundo da programação hoje em dia, são:

* Otimizar o tempo de desenvolvimento
* Definir e padronizar as melhores práticas de programação
* Oferecer maior segurança
* Evitar códigos duplicados
* Diminuir a ocorrência de bugs
* Gerar maior consistência no processo de desenvolvimento e nas aplicações criadas
* Reduzir as chances de erro no código
* Possibilitar que os desenvolvedores se dediquem aos elementos específicos do projeto
* Simplificar e encurtar a curva de aprendizado do time de desenvolvimento
* Poupar custos

1. **PRINCIPAIS FRAMEWORKS**

Ranking dos principais frameworks do mercado.

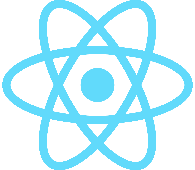
[Web framework rankings - HotFrameworks](https://hotframeworks.com/)

**REACT**

[React – Uma biblioteca JavaScript para criar interfaces de usuário (reactjs.org)](https://pt-br.reactjs.org/)

O React é a biblioteca mais popular do [JavaScript](https://www.hostinger.com.br/tutoriais/o-que-e-javascript/) e é usada para construir uma interface de usuário (IU). Ela oferece uma resposta excelente para o usuário adicionar comandos usando um novo método de renderizar sites.

Os componentes dessa ferramenta foram desenvolvidos pelo [Facebook](http://facebook.com/). Ela foi lançada em 2013 como uma ferramenta JavaScript de código aberto.

****

**ASP.NET**

[ASP.NET | Open-source web framework for .NET (microsoft.com)](https://dotnet.microsoft.com/en-us/apps/aspnet)

ASP.NET é um [framework](https://blog.betrybe.com/framework-de-programacao/o-que-e-framework/) de [código aberto](https://blog.betrybe.com/tecnologia/codigo-aberto/) para criar aplicativos da web na estrutura .NET (dotNET). Foi concebido pela Microsoft em 2002 na sua versão 1.0, dessa forma, desenvolvedoras conseguiram criar aplicativos, serviços e sites dinâmicos utilizando essa tecnologia. Toda a estrutura é baseada no protocolo HTTP padrão, que é o protocolo padrão utilizado em todos os aplicativos.

Atualmente, temos o ASP.NET Core, que é uma versão mais recente do ASP.NET, e foi lançada em 2016, tendo como principal característica o desenvolvimento para múltiplas plataformas. ASP.NET ainda é compatível e atualizado, no entanto o foco da Microsoft no momento é no ASP.NET Core.

****

**ANGULAR**

[Angular](https://angular.io/)

O Angular é um [framework](https://www.treinaweb.com.br/blog/para-que-serve-um-framework/) [JavaScript](https://www.treinaweb.com.br/blog/o-que-e-e-como-comecar-com-javascript/) de código aberto mantido pela Google para a construção de [SPA](https://www.treinaweb.com.br/blog/o-que-sao-aplicacoes-spa/) (sigla para Single Page Applications ou Aplicações de Página Única). Resumidamente, uma [SPA](https://www.treinaweb.com.br/blog/o-que-sao-aplicacoes-spa/) é basicamente uma aplicação web construída em uma só página, na qual a interação e a navegação entre as sessões de uma página ocorrem de maneira a qual não é necessário recarregar a página em cada uma dessas mudanças.

****

**RUBY ON RAILS**

[Ruby on Rails — A web-app framework that includes everything needed to create database-backed web applications according to the Model-View-Controller (MVC) pattern.](https://rubyonrails.org/)

O Ruby on Rails é um framework que faz o desenvolvimento, implantação e manutenção de uma aplicação web utilizando a linguagem Ruby.

O desenvolvimento das aplicações em Rails são implementadas usando o MODEL-VIEW-CONTROLLER, mais conhecido como [arquitetura MVC](https://www.devmedia.com.br/introducao-ao-padrao-mvc/29308) e trabalhado com as bibliotecas Active Record, Action View e Action Controller.

****

**VUE.JS**

[Vue.js - The Progressive JavaScript Framework | Vue.js (vuejs.org)](https://vuejs.org/)

Vue JS é um framework Javascript *open source*, lançado em fevereiro de 2014 por Evan You, Desenvolvedor que atuava em um dos projetos do Google Creative Labs*,* em 2014.

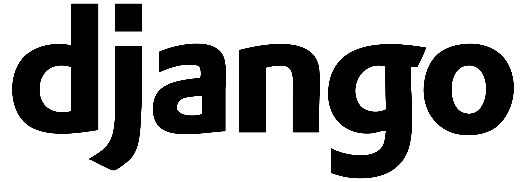
Este framework é muito utilizado para criar [SPA](https://www.treinaweb.com.br/blog/o-que-sao-aplicacoes-spa/) (sigla para Single Page Applications ou Aplicações de Página Única) e também para desenvolver vários tipos de interfaces, que possuem necessidades de maior interação e experiência mais valorosa para o usuário.

****

**DJANGO**

[The web framework for perfectionists with deadlines | Django (djangoproject.com)](https://www.djangoproject.com/)

Django é um framework web livre e de código aberto, foi escrito em [Python](https://www.portalgsti.com.br/python/) e segue o modelo de padrão de arquitetura model-template-view (MVT). É mantido pela Django Software Foundation (DSF), uma organização independente e sem fins lucrativos .

****

**LARAVEL**

[Laravel - The PHP Framework For Web Artisans](https://laravel.com/)

Desenvolvido por Taylor B. Otwell, tendo sua primeira versão beta lançada em meados de junho de 2011, o Laravel é um Framework Open Source sob a licença MIT, criado com o propósito de ser uma alternativa mais avançada do CodeIgniter. Atualmente, se encontra na versão 5.8, tendo seu código-fonte hospedado no GitHub.

O Laravel é um dos frameworks PHP mais utilizados no mercado. Seu desenvolvimento utiliza a arquitetura MODEL-VIEW-CONTROLLER (MVC)

**Uma imagem contendo Ícone

Descrição gerada automaticamente**

**SPRING**

[Spring | Home](https://spring.io/)

Inicialmente desenvolvido para criação de aplicações web escritas em [Java](https://www.treinaweb.com.br/blog/o-que-e-e-como-comecar-com-java/), e anteriormente denominado como Spring Framework, o Spring é um ecossistema de desenvolvimento para facilitar a criação de aplicações [Java](https://www.treinaweb.com.br/blog/5-motivos-para-estudar-java/) utilizando diversos módulos independentes.

Estes módulos podem ser utilizados em conjunto com outros ou até com Frameworks que não façam parte do ecossistema Spring.

**Logotipo

Descrição gerada automaticamente**

**BOOTSTRAP**

[Bootstrap · The most popular HTML, CSS, and JS library in the world. (getbootstrap.com)](https://getbootstrap.com/)

O framework front-end e de código-aberto foi inicialmente criado por Mark Otto e Jacob Thornton para o desenvolvimento web mais rápido e prático.

Ele contém todos os tipos de templates baseados em HTML e CSS para várias funções e componentes. Por exemplo, navegação, sistema de grades, carrosséis de imagens e botões.

Logotipo, Ícone

Descrição gerada automaticamente com confiança média

1. **CONCLUSÃO**

Os frameworks são ferramentas que auxiliam os desenvolvimentos de aplicações, o mercado possui diversas opções e cada uma tem suas vantagens o que torna a escolha do framework adequado uma tarefa importante no desenvolvimento.

A maioria dos frameworks são de código aberto e estão em constante desenvolvimento, o que é algo necessário pois existe uma exigência de desempenho, acessibilidade e segurança das aplicações no cenário atual.

**REFERÊNCIAS**

BARRO, Bruna B. O Que São Frameworks e Quais os Mais Utilizados. Hostinger, 2022. Disponível em: <<https://www.hostinger.com.br/tutoriais/frameworks>> Acesso em: 25 de agosto de 2022.

Find Your New Favorite Web Framework. Hotframeworks, 2022. Disponível em: <<https://hotframeworks.com/>> Acesso em: 25 de agosto de 2022.

Angular, 2022. Disponível em: <<https://angular.io/>> Acesso em: 25 de agosto de 2022.

ASP.Net, 2022. Disponível em: <<https://dotnet.microsoft.com/en-us/apps/aspnet>> Acesso em: 25 de agosto de 2022.

Bootstrap, 2022. Disponível em: <<https://getbootstrap.com/>> Acesso em: 25 de agosto de 2022.

Django, 2022.Disponível em: <<https://www.djangoproject.com/>> Acesso em 25 de agosto de 2022.

Laravel, 2022. Disponível em: <<https://laravel.com/>> Acesso em: 25 de agosto de 2022.

React, 2022. Disponível em <<https://pt-br.reactjs.org/>> Acesso em: 25 de agosto de 2022.

Ruby on Rails, 2022. Disponível em: <<https://rubyonrails.org/>> Acesso em: 25 de agosto de 2022.

Spring, 2022. Disponível em: <<https://spring.io/>> Acesso em: 25 de agosto de 2022.

Vue.JS, 2022. Disponível em: <<https://vuejs.org/>> Acesso em: 25 de agosto de 2022.