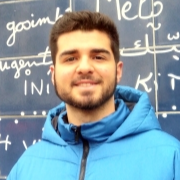
## 

Computação Gráfica - CG 2019/2020

FASE 2

### Mestrado Integrado em Engenharia Informática

![Uma imagem com pessoa, parede, propriedade, homem

Descrição gerada automaticamente](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEASABIAAD/4SssRXhpZgAATU0AKgAAAAgABwALAAIAAAAmAAAIbgESAAMAAAABAAEAAAExAAIAAAAmAAAIlAEyAAIAAAAUAAAIuodpAAQAAAABAAAIzoglAAQAAAABAAARUuocAAcAAAgMAAAAYgAAIXIc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFdpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQAV2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NAAyMDE3OjA5OjExIDExOjA3OjUzAAAGkAMAAgAAABQAABEokAQAAgAAABQAABE8kpEAAgAAAAQ5NDkAkpIAAgAAAAQ5NDkAoAEAAwAAAAEAAQAA6hwABwAACAwAAAkcAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAxNzowOToxMSAxMTowNzozOQAyMDE3OjA5OjExIDExOjA3OjM5AAAAAAHqHAAHAAAQDAAAEWQAAAAAHOoAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAYBAwADAAAAAQAGAAABGgAFAAAAAQAAIcABGwAFAAAAAQAAIcgBKAADAAAAAQACAAACAQAEAAAAAQAAIdACAgAEAAAAAQAACVMAAAAAAAAAYAAAAAEAAABgAAAAAf/Y/9sAQwAIBgYHBgUIBwcHCQkICgwUDQwLCwwZEhMPFB0aHx4dGhwcICQuJyAiLCMcHCg3KSwwMTQ0NB8nOT04MjwuMzQy/9sAQwEJCQkMCwwYDQ0YMiEcITIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIy/8AAEQgAeAB4AwEhAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A6XNKDVCFpQaAHZpc0ALRuHrQAoYHvTqAFooAWlpAFFMChmlzQA4GlzQBBd30FlEZJnwB0AGSfwrDn8aabApMkvlt2UqWY/lx+tJuw0rnP3/xHdwY7CNV/wCmjYz+A7frWE/ibUrhz5l3Muffj/CsJTbNowS3JI/EWo2r70vHcA9HNdv4W8YRaw32S4Xy7kdCejf/AF6dOTuKcVY6wGlrcxFpaQBRTAz80oNAC5pc0AYOuxN5TyhwMDPI9K8dvSLq4k8xjuLHBB6VlNmkFdEaWZ24EzMPQAmpd72owBKfqOPyrO9zXlshPNV/mMpTPRAataXfvYXqzxudyNld3emhNHtmhasmsaalyilGztdTzg49fxrUFbo5wpc0wFopAZW+k8ygB4kp++gDiPG2pusKWcTfvLhuB6IOMn8c/gK44afEpAYbj3JrnqyszqoRua1lp8Z6Lj8K1Ro8EgBZcnHpXPqdlkipdeG4SpIX6YFc1faa9vN8y8Do1XGTTszKpBNXR33w+vCIZLNsgkb1z0Iru67IvQ4Jbi0tUSLRQBhlqM1IDgakGcUwPL/FNwX8ZyRnpCqoo+o3f1pIV8wg+tclbc7cPsbFrGVPJ4rXgx684rNHS2Tsp5rMvbaORcOoJ+lJ7k9DX8G2kI04ybBvimZVYemB/jXVV3x+E82XxMKdVEhRQBh0ZqQFqVTTA8w8SIg8a6nIeFRYiT9Y1rMGrzJ/qLfKjoWrmqK8jqpNqOhesvEEsrhJFVTnoK6GO72xF19OKyaszpi7oz38SX6uFSFGHv1q1DqrXLBbiExZ6HtQ9RXaOs8IoE025Udrlv5LXQ12x+FHnz+Jiilpki0UwMKikAtSJgkfWgDyd5bjUZLy7uR/pE7KHGMYwMAflisyTTp2Yr55h5/uE1yuSvqdig7WQ9dJkSRXWYtjuVxk13MVrnRl4w5FZzkmzaEWlqcrqGnXsd4DbzRjn5Q+Rkfl1rX0+1u1IFxscYGdhptx5RWlza7Hc+GdyxXibcRiYMrepKjP9Pzrerrh8KOGorSYtLVkC0UhGBmlzQMM1Ip5FAHmBQ219cwSMDIspLn3P/6q1IQkgGcVwz3PSp2aKt3IouQi4wOtdHakHT1AIIXqc1BoKkUU4KuoPsRUvkRwJ8oAHsKFsJmp4d80G5Y/6piMD3xit7Nd1K/Ijzq1udi5pwqzMWimBzoalzSAcKkFMRx3jLTra1C6lEpSaaQJJg8HjOcevFYljdFl68Vy1lZnbh5XRX1RWcb7eUByMEUtj9vS1MX2lkbPBwDWStY3bdzp7ORXiDGXMv8AFnirE1xtU5PGKnrYcnpc66wtVsrVYgST1Ynuat5r0ErKx5knd3FBp2aYhc0UAc0DTwaQEi0/dgUxGJ4qtzeeH7hV5eMCVfw6/pmvOLZyV25xk1hWR0UGTf6ZG+FaHHYkGtKH+0fK+/bH0PH+FYWTO+nHTUuRLfn55fIGP7mckVqWYe51S0gHzfOpb6Dk/oKUUnNWMqvuxZ32aXNd55ooNOzQAuaKBnMg1IDSAfupC9MQzOTg8g9q8bll8pyqnGDxWVTWxrTdi9bE3WMNhqu21jffaNwddvpmufRHZFt6o0pLl4EKlhkdcmup8IW4lSbUHzk/u4wew6k/jx+XvVUV71zOvJ8tjqhTq6ziFpaBi0UCOaFPpDGl8UwyUAV7vUIrO3eR5UVwhZVZgCxA7V5LcR5rOo9Ua01oyKG5ltpAece1acOuycrzyMYArNxTNI1HHQv2omvSpmUrGP4T3/8ArV6V4WwNNdR2kP8AIUqX8Sw6v8O5u0tdRyDqWgBaKAObFKaQyvLIqjkgVlX1+6RyCEfMqk5NIDkNQDfaJC53uPl3sOT61lkc4rlbuzsirJEfkZbpWtZ26gDA5olLQqMdTat4goz3q/FLdRgvaTmKVeVPY+xHcVipcsrmko80bHRaP4k+2R7LuIRzr98Kc49/pkGt+KaOVcxuG+leindHmtWdiUUtMQtFAHLvMkfU8+gqtJds3AOBSGVm5PNUJlBd1J4bIpAYt/blpySPvAH/AD+NY8sRVjXI9JM7o6xQIvIOOK1LTqABUSNIo2I0JAFWlAiUsegFZlMjscm4tpQvLrI7fRiMfqK3I3lgfKSHGcgelejHZHmzfvM1YNVIA80ZH61ow3UM4GxufQ1VyCxRTA4ljtkBOeaY6jqTxmkMYMM521XmQB93qcUgIZIEnXdj5l6jvWZcabvViB9K5aytK52UHeNirb6c5ypHIq7b2RSQA1i2dCNqGBVXJptwN5RMDYT8+T/COtEFeSQpu0Wye1jBLS4xnAUEdFHT/PvV4YPTqOua9FHmXEDYbFTBscgkEe9AGla37rgSHcnr3FFMR//ZAP/hMehodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvIj48eG1wOkNyZWF0ZURhdGU+MjAxNy0wOS0xMVQxMTowNzozOS45NDk8L3htcDpDcmVhdGVEYXRlPjx4bXA6Q3JlYXRvclRvb2w+V2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NDwveG1wOkNyZWF0b3JUb29sPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIDw/eHBhY2tldCBlbmQ9J3cnPz7/2wBDAAIBAQIBAQICAgICAgICAwUDAwMDAwYEBAMFBwYHBwcGBwcICQsJCAgKCAcHCg0KCgsMDAwMBwkODw0MDgsMDAz/2wBDAQICAgMDAwYDAwYMCAcIDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAz/wAARCAC0ALQDASIAAhEBAxEB/8QAHwAAAQUBAQEBAQEAAAAAAAAAAAECAwQFBgcICQoL/8QAtRAAAgEDAwIEAwUFBAQAAAF9AQIDAAQRBRIhMUEGE1FhByJxFDKBkaEII0KxwRVS0fAkM2JyggkKFhcYGRolJicoKSo0NTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uHi4+Tl5ufo6erx8vP09fb3+Pn6/8QAHwEAAwEBAQEBAQEBAQAAAAAAAAECAwQFBgcICQoL/8QAtREAAgECBAQDBAcFBAQAAQJ3AAECAxEEBSExBhJBUQdhcRMiMoEIFEKRobHBCSMzUvAVYnLRChYkNOEl8RcYGRomJygpKjU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6goOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4uPk5ebn6Onq8vP09fb3+Pn6/9oADAMBAAIRAxEAPwD6WVv/ANVOQ4OPx61XD9OalD5NdBmTq21RUg/+twarRuB68VIrZ560ATq/PWpARVdTzUgOAOetAE6v/Lqaejbv5ZquJOacsgUf54oAs7uRUinn9KqLLnOGU9+Kd9sSMlWYLt60AWg+D29frUgPHX6V518RP2lPBfwxvHt9W8QWEF1CN0lssokmXHOCi5b9K8y1T/gpX4CsFkaOa4uYhysm3yVI+jEN+YFY1MRShpKSNIUak/hTPpRTgcNzTlOD7V8x+Hf+CmPgPV7xYVlvB6nzYXXr1AD7j+Vew/Dn9oLw78T4EfS7xJC2Mq7KrL+AJ/XFTTxVKbtGSKlh6kVeSZ3w5P604N096gSQMo+bcvX6ipFbPeugxJKkU8VXU88Hrwak3fNQBJn/ABp27J+X/wDXUQPC1IvHX9KkB6inBvao1PNO3fN79Ke4EijcOtFRs+D6UUwOC8zinJL83Ppziq6tj/8AXTg3NAFlZPm/lUgaq6tinJJtH9cUAWkkyKeJTkZ7VWRunpTjLtGaAIfEPiyx8JaZPeahOlvb267mdsn1wABkknHQAk189/E79vT+z9cktNHsXstPtZPKnvrqETXErDBKQQ7wvf77k8gr5ZIbb3fx20y81NobyKKS6sbWNzJGoLNG3ysr7Byy4Ug7QWG7hSMivz0/bb8b3mg+GYbaNmgkupXeO8hdZFKsx3rleDhgcMfmAYjAzxy163KtDooUVJ6nv3jz/grD4L8O27w/ZfGGuahyrK95DYqSO2bdyyjjumfr0r53+J//AAVT8V+PY5LPS9Ri8O6ZNlfKtruRZADgcyOd7fgy9TkGvkXxV4Gk8QRedYyutyVLFAciUd8evfkZx39az9F8LeIbZljgkvGlHG1LswSAc8EZ5GfoK82piHNfFY9Cnh1B/Bf8T2F/iTrWquzQ3UMscjFnMEYbJOed28bmLdzzn1qxo3i0b2h1G1mSWPhhPC+7bnGQB1564JFeZaX4E1wXW6TcszAkZAznuAykj8Bz/XqLbxLq2h2KrdSR6lDt5ivzOznkcxv5e8H23dB2HFedKktkz1I1LK7R6BfXun6iyq0H2eRRhntuGXrgkNnAPHU/1qt4Z+PfiT4Wayt5pepSSNanGyVDHcW3AOcoTwB1x69PXza71C61mbOkyTPbDDCEyy74fUZ/iGc4yoA98ZqDUINSt7USNfxzquDsmHmyLj0+8Dj2J464qqdOz1M6km17qP2J/wCCfv7dkf7S3hyPSdb22niS1jBBY4F+oB+ZT0LYBPHUAnqGA+nI5On0/Wvw9/Y/+Pk3wd8aWOuNLcSR2c6+dHaoF3ICCyhc4Pfg4/Cv2R+Cfxg0X41+ALLXvD+pW+qafdLjzIwVaJx96ORD8yOO6sMjI7EGvfwdZzXLLdHg4qkoyvHZnaqwVacre+KrrIW5qRG34/Suw5SZWxUgfj3+tV1bctO3fL9DyKQE+/Ipd1Q7/l604Pg/T2pgTAk9NtFR+Zg96KVwPOVuMH8qcbpQO1ZMl/gdenao2v8AJpcwG6t6uP61Il2GB/oa51dRx/F+tTw6j7857UcwHQR3AZqc0mec/d557Vk29/096lju1uOv+r/9DP8AhQBz3xJ12306zkZ2kXbEWVs/M5xgbR+I+Y8LkYyxVT+Vv7e/xdh+I3j+402zh8ySxlaJrguXmnlHysGP3cKQVAAHQ55r7e/bm+Ng+E/wp8ReJGmZNSvidG0ZVb/j1cofNuRz8rBHwD2ZV4+Y1+evwl8EpJp0msXixtcXX+pTaSsEY4A+p6n/ACa8jMqyhHU9bK8O6kjzOz8K6xCWVrcSRSHeVAKlW7EY+6QQORXb+H/h9rGumNbhpZIcYCmRg2PfJIbjHYfh0rvbPTV+2tgLj1Irv/BuiR3Plq0Ksc5+UV8vXx0nsj7bC5VBK7ueXad+zeuqW7KVkV15wX2D26GuX1v9jaa/muJFUq3Byx3hvqa+0vCvgO1MkbtB8pHzcjCd+RXWWng21fd/oOYz04HPvUQxVZapnVPLcM9JRPzrl+Bvijwpat9lu5kjXgvEgDDtzx+vWsC58Dajd749QkuHueqtIDtk/mc+nOOmOwr9JdZ+EVneDzEtXX1JAyOOv+eteQfF39n+HVLKbyIVjfnBC/LmtI5jOL95HJWyenJe4z4y0jUb/S9Qhgb7QsaEqOd6n8evbvX6Pf8ABHn4g/Ztf12ye4kW11G3hjaF2wEuIydjY/2o2YDv8hGcbQvw14p+Hlx4a1Zo7nzducHflsf8C/qa9x/YX+IeofCnx5p+oSRGXRL6dYLjDEqDu4J/3cAg9jtweSB72DxScoyifK47BygnCR+vStu/GnK2CaqafMLizikVtysgbJ71YTk/yr6E+eJQ/Y/WnBtufSo1bj9aerZPt2oAeh4H8sdKerYH1qJOcYpwyGxSvYCQuTRTR/u0Uctw1PFTckr/APXqPzyzdvxqEtlf64pIzz0496zb6ATiT8KmSVsVWX/Ip4+/+NAGjBMT8uV5q28uYWC8sw2gkZrNtn+b29a0ITlR7c1WoH51/wDBZfxcz+NfB/hVGCxxwT6lMQx3fvXQKpHTgRA555J5HSvKPBt4reGLONMhQoXj2rrf+Cy32hv2u9DRoykcvhi18pg3L/6VeZGO2Djnvn2rifBOkTQWtnCVY7BubFfOZx5n1GQ2vc67R9JElxz9xhzjrXoXha2uIJ/LTamBtGOvbH+OK5/wxpy+dGzMq+ozXoek21tuWXzod3U4YcjGMV81y3ep9vTqJI63wrbN/qyJFaQguyrwcetdto9r9mt2Zm2rvAHy5BJPtk9T7V5/pmtpZorwyeYGbPy+nSuy8PeJMx4kkHl8GtItJ2HUbtdG9JBIgXbjjlsDrWJ4gtY72PDx7SAcACt2HU7HUGWZriLzFwPvYwcf4VV1JYpEZlZWRu+elFanfYwp1LaHi/xH+FNjrG2aa0jZnjKTJ1B47H2Peui/4Jx/BjR/GsnjbQdQjdrjT5be8hcMVKo5dSF/74Hrj61e8TQMsjL/AAsOPaun/wCCYKNJ8SviF5kYVrSC1UEE5xJJOfT/AKZ/54r0sh1rcrPB4kVqXMu6Pr/w9pR0TRbaz3b/ALPGse7puwMdK0F+Xn+VRr/n61IvI5r7Tc+EHJyP6U4PTR1/kKkjT1qgHJ9zFCdc0KpxTsZPeluA7Le1FC/L7fSii4HhROB680jNinH5k47Ggcnn0/OstwBW3Dj1p6jaKRFzj3PWnA8+vrQogTW0mDWhbSZxWbEdz/j+VaGnx+bdRpyu9gpOOlVETPzp/wCCuNiNa/bi8B2e1X3+Fbd2ABJ2/bdQJz+CGvC/iL8TJ/DLtpmlQeZcZG9s9uML7e9dj8Rvj5cftgftP6X4wmtre1h03SbmyjhhUjyIopGZA5JO5s3Wd3GfQYwPOPiVp8h8QXUtvDJJMxIQIm4e3+c189jqsKk79D6rL6FSlDklozB1TV/F19bySPfLCGGBGr8AHtn/APXV7wT8WdY0C+K3txI28bHUyH5u3WuV1fQPHV0sLaXprzrIxGyWRQzehO5hHznoBkY71JqPwg8WWUdrJcabJHcTSsJIo3VvIjGNrsQ5U5y2duCNvQ54x9jFwvLlOuNZxqWgpfO9j66+DnxMOp6Uieb5n8I55Hf8frXo+seI3tNAuFWRlkZSdynHJ6fyr52/Y10e8h8VfYL/AO6OEz78V9T/ABm8FtpnhONbeNWmdQAPT614FT3Zu2p9PSqc1NdLnzD4x8U+Irw/u79rYhdvl+aWzk5IP1PJ/wAckv8AAOv/ABEsYg0OoQ3Cs+4q8zEnv3/Lr/hXJ/HnSfE3hTU5obXT76ZoYDcs0MD4m5OI0kKlS5xnaoY4I6E4rn/g38bNc1W4uLb/AIRvUo10+2ee7kW9kFwqq4X7k6mMsdy4UBSQrYIr0KeFqzp88UrHmYjE0Y1VCbd2fVXw1+Kt+bhbDxBDJCrttDuM+Wx77h/D6g19Kf8ABPGz+w/Fn4qRj+GLRyAo7MLx+fcbhzXyv8JNUj8dW6tJJ5se4EFozGzDsSjcq3Yg9CDgkYJ+pf2Mtbt/CP7Q3iLTJo5Fl8TaXp627DG0yQLeOwOeSTGrHI6bffNdGTzjHEJvToednlGbw7Udba/I+r0+Y1IFxTUHI/zipAM19j6Hw45eVqTbxio1+7yOcVIDxn8aBjhx1pwHH40Id1BHH/1qYA3B70U4Ekd6KCbngqlT7++KdnP4fpVcy5H07U5ZOayKLG7jApVbA+tQFvyoL8n0p7AWo23N+NaGmzmO8hZeWV1I5+lZkL7h1B/rV20m8uZGXqrbvy5qkTI/J/wX4ds/Cvxa8SWOmwxjSdNSWOGX+KffPlT9Cqg47AgV2lj4BtfElvIroQ0w+Zhw1Ufi34Uh+EPx/vvD7fu7iO4ubUk9ZogC8EhPYtGkROO7VueCdciCqpYqrcZNfC43mT13uz9IwPJOV1s0vyM2D4DzWs+201bUoFH8KFOB7FlNW9Y+GEfh6w8y4muLiToXlk3MT7/4CvT9Dmg8pm4Y9z/n6Vwvxq8SrFJDBCys0kgRQO5rglUnax7DpwWnQ1PgDo0Nl4zikVVDN8vT7tfRXj7T11C3to2+XIytfOvwB1GG11z/AEiSNbq3Jxzz/ngV9Ha4GuNEjuPtUc0e1ZFyQcAjofcVlyvkaLVrpnlfjn4RXHi2Bza3s1rLGcbSPMib/eQ8H+fvWT4V+GuvaTJ5U9ro90u3AlUsrEeuxgQPwNeoaBq6pqO2f5W4YY/iHauuXTbW6gD7I/XIrSjKVrIKkYLc4HQvh4ttGs1xHH5yjqgwAPavRv2Xo9LtP2kFurzd/aU2gNZWJJzGpabe5wejFYiue4cjvWTr7R6bBt+6Mdz1q5+z14In8RfG+x1RW8u301FO3OdwXMm7/vt1X8fauzLeeOIjy66r8zx80jB4eak7Kz/L9XZH1opx3A9qenzcdz71WjkyOOlSLKMrk81+gbn5oWA/FSK2KgWTCcfj3p6ScDFILky4wBTup+lR7+f96nA4NPcCRXwvX9KKjyp9vwoqRcqPnuO53Dg+9Sebk+1Zsc4/SrAnyKksuLLx7CnI24//AF6qCX+dWYOO3WmhMuQnK1aj5HTqMVVtjtP4VaDqneriRI+a/wBu/wDY903x9aal8ULHU7zS9c8K6W99c2iQrNb6slqpkGeQySGNWTcNwKhBt4zXxpoXik2OrPGZMrG2F5+9X6qeJtHt/F3hvUdHuv8Aj11e1lsZgADlJUaNuvHRj1r8a7OW60y/ht7vf9qtQIZgwwwdflYEfUGvDzjDRaUoo+iyPGSU3Fvtb0PpXwh4pa6t9oz83OR3Fc78bvD97Lo66jYMslxbyLMFz94D/JrmtH+Ii6No8bbPMdx0X6VZPxDu/EVq6LMYf3ZACkZDf/Wr5RRne6Wh9xGvT5bN6s8duPif4kfx209pGsMceNySBo5iR1+YMVNe7T/Gfx4nhLT5dPis5mGC0c25uPopGPrn8DWRpPg3TJ7jy7rUNJgluGDM9zIoGT1+leh6d4Uh0q4Zm1TSlsJVVo2+0pguBgFCD39elb1JU2k0hUaddX3aZ6p8ORqHjTSI9SvNkNw8SqIEbITH/wCuu00TV5rS2ZbgFdrEEE56dDXkfh661DwIyyWd4txbyx7nAO7D46hunp2rsNB+IC+IY41mj23EkQc46Akcg89RXDL3dVsdPtFL3Xozota8Rm5gdZJOOvJ4XHevof8AZj+FF74B0GbUNU+zrqGqqrRxRMXNtCQGCs2AN543AZA2jBPNfI180nivxNp+h20ixy65f22lqQfmTz5kiLD/AHQ5P4V+gUZjjXbGoVFGFH90dq+nyDCpp15brY+L4jxsk1Qjs1r95cWTJ78U5H2iq2/PepQ+RxX058noWFfB/kakWTb/AL1VVk471Ij4oQeRaDn8akEvzVVWTC/XpTt5z25NGwalktmioN4HX+dFBR82pKxPUZqeJ8jt0xWdE/zc8+1WoZeRWMQL0T8/41et22isuBssPbrV6OTy/StEiXrsaEUmMdqJbrZxVE3fFQzXmD36VoRqXZr/AACc1+WH7b/w8uPhj+1F4mtoYzDZatcf2zZt/wA9Y7jLvj6Tecn/AADPev04uLncTjPvXx3/AMFYLGIab4F1ARx/aoZL+HzMfMUxbNt9xnJx7n1rix0FKk2+h25fJxrKx81+G51mjh83uNgHf8KZr/wftpbrzY9Z1SDzRuKRT7FPtXFXHiqSz8mSN/fKnr7111hrP/CTRLtkDSKAMg9Ca+TlCpB3ifcYatTlpLU1PBfwR0vUZTG/iDULO4wR+/KyRn/x3rXfWn7OUMdgsLeKEkULu3QRosjKew4P6V5nfXeqaVa7WtpJsA7Sq5YnqBx71ofCXxprlzqKxTRTrIuSvnKSAAeP8KT52uZ2PoqObUIWhyO5654T/Zqjspmmk8TeKLe2mZVES3SjknAOAvT65ru/Cvh9fCd/cRefJNHa8I0jZZu2TWFpnjK4srCOa4Zs4yc/wVFD8SYbwXVwzhdgOHJG0Af5B+hrzZSnUkceKr0/iWh6/wDsfeGZPHH7S2k3RjZrXw+lxqc/ou1GhjGfUySxsB6IfevucHJrwr9g74UN4D+D0evahbtDrPjLZqEquMPBa4Jto8dvkcykHkNMVP3Rj3GM+hr77L8P7Ggovfc/M8xxPt67mttkTo+f505XPbp0qEHP9KkU5P8AKuyxwk6Of7xGalWTB/nzVdeVqROR60ATCT9OvFPEnFQKcf1NSDr6c5+tBWqJfNoqJ8E85/A0UBys+aox/n0qxDgFearq24/7NTwBs1noUWIpMD1+lTm52rVXcFXn8arXV35f8qpOwi+958uVP61BJe89ay5r/H8VV5tU45ajmCxsGfec9c18i/8ABV2+26X4Hth99/7RlbnoB9kA/ma+mNW8Zaf4ZsGutT1Cy021XOZrudIY/wDvpiBXxH/wUE+LOl/FP4kaX/YuoW+qabp+lrGtxAd0TSvLIz7W6MNvk/MMgkdeK48fUSotHfl9NyrpnyXq0smlzNs3NbSEkrnmI+o9vaui8BeMV067hzMFjyCcDpj19qpazppYM38Knp3rmNS0qXT1zD86SDJGcYryIpVI2Z6suejPmR9deC/G+m6zpaCTytqghXzjJrvdB8X6PYaW80kdtNPbxtsB/iUcgA9jx+tfDWn/ABGvtNgWHy5mWPnBQ/ga6TQvjNqM9vNHFHLPJIAp2Rs+zvxjucVxzy+S+F6HpUs4hs1qfUXivx1b3cU10rRQpFgsvVGGPmGfUZB98GsL4Y6XN451/wC3TRmPSIZRLbxgbftODnLd/LyFwP4tv93hvOvh34O1jxrCP7WW4tbGTJ8h/vzAnOCP4Rn8cDtmvozwTpS2sHRVEmBhV2genFedWkqD5YvU76PNX9+S0P0k8EIIfBejoOdlhbqOPSJRWsoAGPpmsH4Z366t8OPDt0rBluNLtZNwORzChPPsa3h0r9Cjqj83qXUmPUfj/Sn4ww9uaYOGqQDjiqJQ9BUiDNRjgVJGCq1JT2HxnnpTwcio0BA+tSKvSmApO0/dzRSk5NFPlQHzTEMn9KtRISPSoIBip1YLWOhVxJ3+U9l+lZ1431PanarrMOnj95J8w4CL8zVyeteOpgG+z2rdfvMCf5d6UmOKNS/uVgidiwVV5Yk9B9a8x+Knx0t/CXhzULy2y32GNnaQrncR0VR/ExOAB3JxVjxfqtxPptw0xuG3bRhs7Vyw7dvxrznxjZtN4O1YJj93HI6scfIy8hvzFQ/IuO54r8YLzUPEGpR2viiG01bVIoFn1Ce4iWdUlYt/o8IcEJGuPvKAxUIScs1eX+JZXubwnGAoCjjgAen0r2b436Wo8Y3sif8ALwI5sY/hK7Rz3Hy9a8j1nTXUlseufrXyeJrSlXlF9D7TB4eMcPGUequzAeFZlKnrjmsa60DzWP8AsnI+ldFGm0ndjdnoe9SNYLLcKfut2HpRCs4mk6Cmih4Q8MR3Fwqn5SowMjtXqvhHwhHYbfLVZP4hu6Ke9c34c0YecrbQC2Oc9a9P8JaWAF7/AErlxOIlJ2OzD4SEVc2/Cvhv995hX5FX5Tnoa7rSgLeBV/u9/WsvRLKNIBzyozWvCnnOqqGxnHTqK8epJydz04wUUdBY/Hjx18E7S317wzJdaxpcC51HQGKs08Y6yW+7jzAM5jON45Uqww/07+zn+274R/aH8IQapptwoRzslC5zBJ0KOh+dGHoRmvmvw1AHiWM7dqjkMOK8/a9m+FXjLXNa0mKNbbw7erJexwqVNzp0xgMoY9GdJbl5E/2YZUAyxNfUZDmVSUvYT2Wx8ln+V04x+sQWvU/TqyvIb+2WaCRZoWGVdGyDVjG3j+VfMXhz4nah4USCW3muDBvw+0gbUP3WI7jAHJHcHpXrXgv462utJEtw0U6yDHnQkAjHXK57dDg8elfWqavqfH8vY9GQc8D3qQDp06YFVdN1O31SLdBMsqjrtPI+o6j8atqMf/WrSOuxPqOAzj374qQLg9qahyeKcBhv60kg5iREyO1FGcf/AKqKNQufLWpeILfRYN0zbmP3UHUmuc1bx7PcnYq+XGePlPJrL1SQyyrL5kkjKTuBQkg/57iprhTNZM0KpIjLg5AO0+uMde1c+rNtEZ8+ob2+Zm27sEbtgx/Xr1z+VV7mBUMkeWkXbyM5Pofp/TmnS6cZpMswHG04foD6dD+VNvbGOG4+WWb5sd+uOuTkn2oasFzO8Q+XPpEy/M5EZMYC/NIQM4HbqP1rkopIUnkX5mt7k54XhgQCQAee549jXcajErWzDZubdgKjEEcdMc/0rjxpf9mXZhbdGtuQcE/MY2LFGI6cAFffYcjpRZhc8x+Kfhxj9huGVvMaF7WQkY2mNiyA/VX+vymvM/FXhXybBmK9eSK+nNY8Nw+LLCSNWZ5rggnK8JIv+rf1AOWQkDpID0HHn3izwDus2PltuXPy46Yr5HN6bpYj2nSR9pktdVcP7PrE+bNX0doTuA6cU6ztDcRq3O4V6d4u+GcsNmWEZ+gFc74X8JvPP5DKx5xyK8/214nsRo63KfhzcjKvX6ivRPBsDTSL1xWXb+BJYZOI8d84rtfA/hR/tSq3pnkVy1ql1odtONlY6fSbAvGuM8DFdJpOjsqjj5v5Va8PeF/MjHHDYzntXVW2l29imWxuHf09K41rqy6nY5nUbtfDWmy3EnRAx4rz210y48a/sx60fMmjvvGGpT2MDgfM3+kSJuHrgRx4x2IruvFZt/E/iu10GRZPss0c1xcFGKsyxoWCjHPzPsTjB+fqDWxaaJ/bvja0srVYXsPCcHkoq4WJrkp8+wAdFXCj2A9DX1PD+Hetbo9D5PiLE6Kh13O48PWUetaEYtQtbW4h+VQk6iR2HAHLc9yM5HepLXw/a6VGkNpDDDHCMowjAJXsOmc+5qxo1gAn2dVEKMpdd3GOMAZ546n64q4qpbTL+8bY/AyeGPPGMD+WP0r62x8abXh7xld6dtdbjZcRAYBYq2fTjJ/Ou+8M/tAHdHFeR+fuxgqpDdcenP5V5OxNu6swZUbqTkNweOmCf5Ves5maZf8Ann/d+VVA/n+NGq2K6H0b4e8Zaf4k/wCPWZfMxgxt8rf/AF/wrZXntXzHZTTWDho5riPYN5wGIz/k16N4N+MV3YgRXn+mwgDbIf8AWAfXv+NVGT6mfL2PWMbh90UVU0zVoNbsY7mCQtHIOOxH1HrRWlidT448RQK+kLJgqXJBCsdpAArL0l2js4xncrEnaQMLjHTv3oorGnubMk1+ERXVvtLKrEnaDxwM1hxq0msbWkYqgDAYHoOOnTmiilLcDWvP9Jsol4RVP8AC5+tcf42lNjd2l0uGkWaG3YNyJY5nVGU+33WGMcoOoyCUUdSepUsL6TR9YxbHy1jRsLksMdQOc9Mn/wDXzWh4j0uAzxbYwi3CF3Vemdx6UUV4+eRTwt33R7vDrf1r5Mxta0C2nsm3Ju2rxXH2vhSys9dXy49oYgkdqKK+Kk7H3dPc6q88P2qW24R/dXI/SjwpaqNTP+yeKKKylsb9D0bSoFit9yjDHPPpUdwfN+98244P+fxoopFdDmdQ1JtJg8WaxDHD9u0GyKWbsu4JuXeSR3O5VP4Cuu8JaFb+GLCO1twzLHkl5DueRjkszHuzHJJPcmiiv0DJUvqsPQ/M88k3ipX7/wCR1QjDR3BOeF38EjJJx2+gqawu2i01ZFxuwvJ5xzRRXsR3PI+yU9ZJhTzFOGkbDcD3rUis44bVcDJYKSx6n/OaKKzK6jri4fyjJuJKDIB5rf0I+fCCeGYH5gTkcUUUDexfHiC80ZmhtbmeGPO7akjKCT1PBoooqkRzM//Z)![Uma imagem com pessoa, parede, homem, interior

Descrição gerada automaticamente](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEASABIAAD/4S1GRXhpZgAATU0AKgAAAAgABwALAAIAAAAmAAAIbgESAAMAAAABAAEAAAExAAIAAAAmAAAIlAEyAAIAAAAUAAAIuodpAAQAAAABAAAIzoglAAQAAAABAAARUuocAAcAAAgMAAAAYgAAIXIc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAFdpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQAV2luZG93cyBQaG90byBFZGl0b3IgMTAuMC4xMDAxMS4xNjM4NAAyMDE3OjA5OjExIDEwOjM3OjIzAAAGkAMAAgAAABQAABEokAQAAgAAABQAABE8kpEAAgAAAAQyMzcAkpIAAgAAAAQyMzcAoAEAAwAAAAEAAQAA6hwABwAACAwAAAkcAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAxNzowOToxMSAxMDozNzowOQAyMDE3OjA5OjExIDEwOjM3OjA5AAAAAAHqHAAHAAAQDAAAEWQAAAAAHOoAAAAQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAYBAwADAAAAAQAGAAABGgAFAAAAAQAAIcABGwAFAAAAAQAAIcgBKAADAAAAAQACAAACAQAEAAAAAQAAIdACAgAEAAAAAQAAC20AAAAAAAAAYAAAAAEAAABgAAAAAf/Y/9sAQwAIBgYHBgUIBwcHCQkICgwUDQwLCwwZEhMPFB0aHx4dGhwcICQuJyAiLCMcHCg3KSwwMTQ0NB8nOT04MjwuMzQy/9sAQwEJCQkMCwwYDQ0YMiEcITIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIy/8AAEQgAeAB4AwEhAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A7mlzVkhmnZoAWloAWlzQMWigQtLQAUUAGaKAKeaXNAADTgaYAzqiM7MFVRkknAArgNY+Lej2Tyw6fby30yEgMCEjJ9c8kj8KlsZw138UPE93IzRXkdrH2jghX88sCf1pyfFDxOuA9/E+O5t05/IClcdjrfDnxVFzcpbaxHGofCieIEAH3B7e4r01JFkRXRgysMqQcgihO4mh1LmqELRmgAzRQBSzS0CFo3YGTQM8k+I/jb7X5mhac7LCCVuZOm//AGR7dc+v8/LXUA5BqGygWRs56+1SLFIxO1ScHINFxpDgskTZ2svpxXpHgPx9LYvBpWoSbrZm2xux5j9vpST1Bo9lRwyginZrQgWigAzRQBTpaAAVT1aRo9KuXUkMIzjBx2oBHzLdSGa6dlABZjwBWrpWgNeOpnJVP51hUnyo3pw52dfb+E9O8vCpz6mtnS/DtlZ7nMasW9R0rl9pJnZ7OK2LVxo2nzqVa2jPviud1bwdaywtJaDy5l5UA8H2pRm4sJwUkdZ8MtZub2zutOu5GeSzKhN/UKc8fgR+td9XoLVXPNas7C0VQhaKAKO6nA0CFrL8SsyeGNTdG2sttIQfT5TQxo+fNIto3ud0gyR0FdhbDDBV/CuCu9T0MOvdOitYyEGTitFflArFI3Y8BCOWAqs7Rliqupx6GhrqK5n+C1kt/H93CpwhhJbHccEfrXqlejTfuI8yrpNhRWhmLRQBlbjT1egCVTVHXLRr/Qr60T700DoPqRQM+ftJUw3M5lBXyhhgex7/AMquS69Kh/0WIADoz8VyThzS1OuE+WGg+DxbqMbgSeSy57Gurg8QW0tn5z3kEZUfdaQA1E6dtjWnVv8AEcve313qM5IuJ/KY5UKdi4+p7fhUsCtbgBVBJ6SC5zz+AqtErE6ydzf8Ma9JpnjWBby1Dm7g8nzI5CdvOdxGOemPxzXsgrpp25VY5Kl+Z3FpaszCigZj5pQaBEqtTpJUiiaSRwiICWYnAA9aAPAvEhs5dQvX0xiFkuC84XIG0k9M/nWOyOkuI0VTjgkVjJq50RTJ47eSaEGWUeYD90Dt+Fanh3wtaa2bw3EskbAlItnY46n15qHPl2NY0+a3MXbnR59QtFAjzIn7uQoejrweP1+hFWdP8PtHJGJUMYRfvA8tk55rPnsrGnIm1Infy7bV4L+3iW5W0UKh4KmQt+IOMD6EjvXtEbM0SM67WKgkehrai3sc9eKSUu5JmkzW5zC0UAYmaXdSAkVqjvrYX2n3FozbRPE0Zb0yMZpgtGeGR2zW95cWN0oLoCkgznkHBH86tpZ7gG/cuB3Zip/Hg/0rik7bnoxV3dCXKvHEwiMQbHVEzt/En+ldB4TjW12JnqOST69zUNprQ0Saepp3WnIb55VXDSAb9rld2OmSDTjawCHbNbCQH/noxf8Anmp5mh8kXqXtJhS61m0i2Dy0+YrjgbeR/Ku8zXVh17tzixL95IXNLmug5gzRSAw80ZoAkU1KDVCPOvHGgyxakdXtYWeOVczbFzsIGCT7Ec59Qa5CMl5ACx21x1Y2Z30J3SNd4UawkBIXK4FZmmR363LSLIxjGB92sY2tqbzvdWO20+FrYM1w0ju5zlug9hVuYq0ZIP61MikzS8JW4a4ubok/LiNR+p/pXWA13UVaCPOru82LmjNamIZooAxKM0gDcaVp1ijaSRgqKMkntTuI4XW/G7XtzJpWnxqIpEKyzOMkJ3OP0/GuFScCQ7CSu4gZ7jOKwqanRSfKy1JdSG3ZkAZ1OCCe1OsDfTnf9tjj9ixGPyrnsrHfSu5G7BHdRunkakSzdQEyv45rVe5McDLI4MgXlsYzUO2yKqaO5my32r6QG1GxmWWHCySwrw8a46kdx7/pxXpPh/Vxq+mxTnG5lBOK74KyseVN3lc180ZqyAooAxaDSAYzYrB8UXBXSpFBwNrMfwFDBbnnulac1tFePMQ1wx2E9gMA4H5/pWKQYzIn8SOcfjzWMzanuJb3RMxUn73XNbFtZCVgd4C98Hk1jPRnTSd0dNZ2tlbxAxysT3BPeobcfbdSY9YY/vHsT2H+NZLuayd9Bngu/jv5ZkkO6TBVtw6iux8FWv2C08lT+7Msmwei5OB+WK9BHms7GimSFFMDFpjNikBWlkwMk4rnr68ivLk2zMCnKkfWk2NHPhxGz2k4xPHgHP8AGOze+RWPqmmOJGuohkH76j+dRJaGkHZmLLbHh1P4irNk9ypEaqrZ6ZYisW01qbpNS0N6z028PM1wIkb+GMZJ/E9PyroYY47K02INoAyc9TWMmnsbRT6nGeCPOTVbqeP+GMqB6sTx/KvYrCI2tvBEOqgc5ruR57OhBBGQcilqiQooAwJJVjHzHGaqSXWThRj3NJsaKUn777xJrnNetZAguYMrIhxnrke9ILmX9ttdWjjiu2NveRcJKB+h9RVuGzuE/dmSOQHo2aQzO1LSJbVGmMJEefmxyB71StYiJFZexrnmrM7KUuZHTWzZALCqer37GNoLdWeVgQFQZNZJXdjVuyuT+AdBurdJp72HywZAwDYyeOPyr0GNd3PbPFdyPNbLdtdpC5jY5yM4zyK0UkSRcowIqkIfmimBxX2h5pic8dqGz3AqBkbY3dvpTZER1KOoKt2piOO1jQijs6IWTr9Kx0N7aDEMzAL0BOf8ipsUmaw8S3VnHDHfQJcQTR87RjjoR71BJPo0s0ZtHuInbJaPHTGPX8fyqXHm3LjJx2NW2+wT4C3cig5AJHX36VrWEOnRXH2eMOwBAeVRwTjOCevT2xSjBRdxzqSkrM6CNg6hI12xL6DFSy3SwYUcueij+damIR/vFy3zE889alRpYeY5T16NzQBft9RDEJMNpPQ9jRTuBxjyeVbxzj0Ib8OR/WtJVDoJFOVYZGKQETx59eelV5VeNd2Mr3OaAGBkmXa3zetYl/pS7WKYBHOBQCM29sJpbe1KISVUg4+tQW+nol0xliywHAYdDk4NSiinFpQiwySSp/uEj+ddDYPcW9lNsO996HLjqOfSgZs2upXz/JtAzxwOlacDqvzON0hPzMepqkQy7HJngDj61IsnufwNMRJkbM8HPtiilYD/2QD/4THoaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLwA8P3hwYWNrZXQgYmVnaW49J++7vycgaWQ9J1c1TTBNcENlaGlIenJlU3pOVGN6a2M5ZCc/Pg0KPHg6eG1wbWV0YSB4bWxuczp4PSJhZG9iZTpuczptZXRhLyI+PHJkZjpSREYgeG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMjIj48cmRmOkRlc2NyaXB0aW9uIHJkZjphYm91dD0idXVpZDpmYWY1YmRkNS1iYTNkLTExZGEtYWQzMS1kMzNkNzUxODJmMWIiIHhtbG5zOnhtcD0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wLyI+PHhtcDpDcmVhdGVEYXRlPjIwMTctMDktMTFUMTA6Mzc6MDkuMjM3PC94bXA6Q3JlYXRlRGF0ZT48eG1wOkNyZWF0b3JUb29sPldpbmRvd3MgUGhvdG8gRWRpdG9yIDEwLjAuMTAwMTEuMTYzODQ8L3htcDpDcmVhdG9yVG9vbD48L3JkZjpEZXNjcmlwdGlvbj48L3JkZjpSREY+PC94OnhtcG1ldGE+DQogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwACAQECAQECAgICAgICAgMFAwMDAwMGBAQDBQcGBwcHBgcHCAkLCQgICggHBwoNCgoLDAwMDAcJDg8NDA4LDAwM/9sAQwECAgIDAwMGAwMGDAgHCAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwM/8AAEQgAtAC0AwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A+5FcH2qQN/hUAfJx+VPDfX1616By3JkbIpw+UH1qAPzT1f5aAsWI2z/PNSKciq6yZPtUiMOPSkUTqQeM96erYJ7jpUKOAacj4FGgE+eT+dKrZ79fSofN28np161znxJ+NXg74K2EN54z8X+FfB9rcHEMuuatb6ckp9FMzqGP0zS5kVuzq04/wpytxivHfDP/AAUA+BnjTU5LPS/jF8Mbq6jUuY/+EltI9yjkspdwGx6qTXUWv7SHgC8mSODxx4PuJHQSKItbtpCyH+IBXOV96nmsDR3icr75p2eKr2l1He2iTwSLNA/3ZEO5W+hHFTb9wo5mIkQnFOBx/Ko1PPWnbtvPr+lPmvoIkV2OKdnn8aiD49aeD834dqe5LHZ4+nrThyO1R78t7d6cDgU9heo5utAcgkelIH55pN26gaQpY9j+lFJn23UUw0ONSRge1Oz0+vFQh/mpynI/GgRMJMDr9acsm8VArY/Knb8L92pHcso5z9OvvUiyZxiqsbZH1qQSetUNFpWJX9a+ef8AgoH/AMFKvBP/AAT68JWs2tRtr3irV1MmmeHrW8iguJ4hu3Tys2TFANpUPsYu/wAqqxztvft6/tx6F+xF8DNS8RXUljf+JZI/J0PRpZSrX9wx2qXxysKcu7cZVCq5YqD/AD0/Hr4l69+0T8X/ABH4y8S6lcaprniC8N1dXMxzu/hRQBjZGiBURBgIiqAABWFSpbQ1jBvU+yPj/wD8HCvxq+MlpPY+D7fw78OdNbgNp0X27U8Z73FwCgI7GOFGHOD0r4m1jxdfeNvFc2sa5ql9qusao5eTU7udp7i6kPUTPIWYsf8AaJBrkpYZLWUumVkhbkZyVxzwe/HPuKtf2otw/wA8arHMBHOg6HIyGH5ZHpjHpWHM2aI6ifWbi4uJBcvJJdQsP3RcqJlUchT1WRRjjoR0zwCWviC3WbcsbSiMGZAAAbhAMtjssqg5IHDjkc8HBvtSk1XTFdm3XNiVildesqr/AKuT/eHKk9wAeuTULSs4S8jZlkkHmfL/AMs505z/AMCAbp6/Sp6DPpX9m39vPxp+zLrdpL4P8S6rYwQZlWBZd1rfR+kkLAo2OAVZSV+8pBr9qf8Agnj/AMFGPD/7cfglUZbbR/GljDvv9LVzsmUYzPb7uWjOeVJLIQQcgB2/nISTybgrAx8st9otscbCGYFfocHj0Ir0v4AftFeIPgX8QdH8SeH9Un02/wBMlE9vNEceW38SnsVPPynII6jnFEZuHoOUFJeZ/T+Hx9cflTg+T0r5R/YM/wCCmGi/tj6Db291Db6P4ot7ZZbzTxLuDMpEcjRk/eTeUOOqiRQc/eP1Lb3AnjznPYmuqMlbQ5mnsWhJgenrT924delQK4ApQ3+fSrRJY380paod/NLvzmm9hakomwf16U7zOtQlgCc4pC+FpINyXzdhoqEyH+9t9qKoDj1baRQrc8//AKqZuNKrc0xWJlOOtKH4qNWyR/OnKQeOtSImV8gHv15rA+JXja18CeEL7VLqSZY7OFpXWJSz7QCTgAE9M9j9CeK3F4P8NeV/tlTTJ8A9dhhdoXuLSUNcBFb7KoQkzEMQp2YB2nhjhe9KW1zSnvY/B/8Ab+/aK1746/tDa3rWsRPavFcNBFA1691JbxqTtjLtgZXBGEVUzk4JJY+Hy+IFvX2uvLdHQYYH+v0Of6VY+IGsNqeu3GzfDGGCiN33sgAAwWx8x45PGTnGBgVN8PPhzfeLr1PJiYqWxkivMqVYxjzzO6nSlOXs6epitDNqk+2JC0jYyF5DY6H+f4Guk8PfAbxN4kRWt9NuCuODtx7ivrH9m79m7TtAnS51K3jnm4IDDO2vqfwr4S07ydqWscaY4ULjIr53FcRKMuSkvmfU4PhnmjzVn8kfmVafs7a5ZiaWWzuFbbh0C9Rjr+de2fB3/gnLrHxF0GO7aNrWGZARuXkjBwR7g/ofqB91x/BrR764TzLWNvM64zj8ulemeHNHs/DejQwwpGsajHHFck86rzjZaM7Y5Dh4Su9Ufm/4g/4JVa7Z2ZazbzGjJA/xHP6V5Rr/AOw7428LiSNtPk/dOxPp6dRX6+3VxHJhV2jjFYeuaFaXyyK0UbbuScda5o51iYbu50TyHCS2TR+SHwY+LXjD9kv426Xr1slxZ3+lyhhHKpCyxn5XU+qsmV/HPUCv33/Yg/bZ8Kfth/DOHVNFuFt9TtkA1PSWDNcaa54G487kbBKyD5W9mDAfBv7SP7Kmj/FzwbMtuiWesWal7O5Cj5WH8LDup6V5D/wSS8e33wW/4KDaHoeoLJYxa9FdaVcpz5bsI2lQgjkMrRjBHVWIPBNfUZRmkcSuS1mfI5xlbwr54u8T9xEfIyOnapFbPcYqGIsyfN19D2qRWIPU/lXv6s8B7kwam7qatOx9Pyp9BWHF+fpSZz+f5Uh5/pQc7vWnzBEAWx97H4UUE4PUUVJVji1m3NUivk8fzrLjvMHk/wD1qkivM/0q7mZpocZ/i47U8D5s1UiueKnR9y8VQEwdi3T5ehrwv/gpf4k1Dwn+w78Sr7TViN1HoVyC0qlhGhjIYgD+LB4PVT8w5WvcwcJ6186f8Fa9b/sP/gnZ8UDtjZrzTFs1DZ3bpZo0BUDncCQR2BGTwDWdT4WXT+JH8+fhfwgfFHiO3tmO2NpAHA7DPTNfW3wr8AWfhfTI/JjjOxQAcdTXzL4DuF07xLDHEMFnyo9fSvq/wRFL/Z8IbczMozxXxefTlZRufa8OQjdytr3O98L3DBlwW3scYHQV7B4JE01oitJs8sdvw715B4OuLfTL4NdSxxqzAn1r1/wt8Q9Ft4tq3dqdoHR1yK+TVCTdz7ONSPVnonh62laZPM+ZdvBzzW/BLucRlfmxmuW8L+OLO+n/AHc0bKeRyK0J/Ftqtx8rD1PPNdEY6WI1bub1rZvc+uWOcNUV/oU1sWZgWBXHXgV5R8S/2z/DPwkupY9QuwZIcGVI+SmckfoD+nUkA+L6r/wV5sNdnkttI0C8mOcI80gHmc9lAJz7VvDL6laN4o5a+PpUXaTPqLUEZ4+AVb7pUmvh34wa1efB39rbSNQtd1vqOnXkGq2cgHzJJHIGXgDlW27SO4JFeweGP26f7WiV9Y0K6gjYAs1uDIY/r2/PB61xv7R/hy2+KP7TfwdktJdsHii9i00yquSpa5t0XIPU/vuntXflFGpQxUYtbnk5xWpVsJKUemp+1/hG/m1TwzY3MyLHJcW6SOgIIUlQSMjjjpxWqq+1UdCsl0vSLe3j/wBXbxiNctkkAYHP0q8pyO/Br9C9D851Acd8Uq52/Sgfj0pQP8ijQkaUwMnpTj8p/wB0U4im7AWo8xgSR6/nRTxxRT5hHkgmYd6liudv/AaqbuB1NORtp+lIDUtbrt+NaFtcZrBgmrQtpsJnFOIGxHJu67uK4X9p/wCFq/G/9n3xh4Xwhl1rSbi2hD8KZSh8vJ7fPtOfbNdlby5T8KmDs3yg/Q+lW1fQmMrO5/M34J8JXen/ABntdDuoTHfabqMtlcpg5R4iysDnnhlI5weK9i8d/HiTwGf7NsbeS61Db90cLF9ffvXrH7eP7Pnh7wJ+0j8UPiH4NuryNbJ7jUrXTpLUCFrsRsLiQsWLNG8vmOqgIeRzztHxr4Vmk8eWN7rms3k15cSTmNYUbykY7QcsExn72AOnHft87jsHGclOpsj6TL8ZOEXTpbv8Da8TeKvE/iOQteavBpkbL83n3Yj3k9gAc1h2Wo6jod4slr4mUt/eS5O38/6VNaeJY9BhuZLHTbO4uIQSfk2wwf8AAVxuYcnJ4rc8IajrPxRhvIVtbHdp9q9w5ETRlgrKB824gFt3GRyVPbGCNO0dlb5I0lUi56yfN83/AJHqP7Nv7Slz4PvzDq/iTT2tZGDgy38eYx0ORuyB+FfTvi/9qT4baL4Ikv5fiJ4XN0se4w2d8t7O3XgRwlmz+H1xX58+LvC0lv4RvLq8haHZGxVZUw6kcgj/ABFexfB3/glF4q+MfwAm8U6frdnBr11afabDRpocLcoV3Khm3ARyMMYypXJAJAyw82vgsJJ+0nJxTdj2MLjsfCLo0oqTSvr2+8p+MNVX4l3za5D4Zury11N/OtrnW5/s6zggBGS3TczLtAILsgIOe9dF4D8KS6ZH5tx4y8E+HLmQnZbqsMEmeeCZC5/Q11l4ll8QvhH4S1uSGSwkXTo4b6B0ZHM8X7mZB/c2yRuvTPGOMV4z8PvgtLZ+PFkvriG40dbmO4laOPzHmRJA5QDbuDPtCk5AwWyWHBKPI7wk+W2muv56BXjUUY1YRc+az0039NfvZ7F9t8QWki6bqPiXXfsM53Ry6c9j9nmBxyrLbZ7DqAfwrk/2g7jxZ8BrPwv4u0Dxfq10+g6xFdWaalb2ty+nXIIliuEPlBGAeFcqyEE7c5GRXoHwQ+A0+s63eX2nJcaTpM0pMdhuJhf1IT+Fs9x1ya6L9rP4NLefCLQtDuZIbW48SeJdP0qO4ddxgDyF3k29wscbk+w96zo4j2eJjZ3V+yKxWFVTDPSzttdn6ef8E0P2mPEX7T/7LvhzXPGC48UNYxG/kazFm1xJl1MhiAVU3bN42qqlZFIGCM/Q/wB4elfHP/BJH4o+EB4C1P4b+F7OyRvDMa6hfajCsrT61dTMBcXdzLKWaad3KkyZ24wqhURVH2Gp45/SvrcPiIVqaq09mfFY7B1cLWdCsrSX6q/5EnT/APVSg9qYTgZFOz8orc5ByninD/63FRhs0bsUASAjHaim8Y55/CijQdzxkzZ6fhTt/HvVUS804TdaQi5HPhv8TVy2us5HH+NY4n/P0q1bzZb3xVRvfUhyOgtLgMBk8151+2R8Vda+Df7LHjzxT4dH/E60HSnu7dtiyeSFZfMlCtlSY4y7jcCuUGQRkHtba4JNV/FPhvT/AB34U1TQ9Xt/tWk63ZTadfW+cefBMjRyJntlGYZ7ZpzTcWkXSkozUmrq5+Cuq/EHXPjZ8VrXWNT1/WNRXUdSjvZrW7lBjRwJFZkXGEyzsSEwpJBIyFxnwfCNh401q1SNYo7tRqlskf3ZAcRzf98sI2P/AF3WtX4r/DHUP2Yvjnd+D75nmvPC2utavMU2fao0mDxygfwrLCY5AP7si13eoWNjrVzDb3iyDyZRLDPBM8E1u2Cu+ORCGU4JBweQSDkcV8fWxFSK5Zt9V3f9XPvY4Sm5qdFLXVdE/wCkeSWHwfvrLVcJH5TN1VkDA59j612fhf4O69Zjy7V/scLkM6WqCLefVtoGfr1r0iy8C2NmnmQ+LPF0bMOSz2EmPX5pLRn/ADYn8az/ABZYaf8AZ2hj1DxXq80gwA2t3MaN9Ut2ijb6FSK4XjYy0cvwf/APVo5fKK5ow+9r9Lnj/wAY/CsN1rFh4T+0Lcatq13Gt1GjbntrVDukdv7uQMDOMk8dK/Rb9jDePAvks3yxRBQvt0FfCvwy+HNnoHju4H2exsZcK7iKMIqKeccdzt5J5Nfcf7Ler21lMIXljS2mBUNngen61zYqpz8sY7L83/SOjCU3DnqT3dtuy/pnm3ivw7c/BD4zaxat4VvPFXgnxnePrEKWTwG80XUX4ulRJnjWSGZgku1XDK5farZNaunt4YN4Wh+HPj8yNwVGhCJiP955FT/x6vZPiz4St9SBWZo3XzA+FbkDrkHsRWTp3gy/t3iaHU3lj7K/XFZfWOk43NlhHvTnyp9LHE6XYeKtFgkk8O/Du9sI2O5H13WLG2jGe7C2kuZR/wB8Gorn4SajqXiO18VePtWs9Uu9Njkg03TNNt2t9N0vzh5cknzlpLidoyU8x9qqrMFjUnNeia7rOqadb+TMyFCQuFHWsbXdT/tiO2tWzIrXMKqi4BciRTt5z1xis/rLfu00l+f4g8Go2nVlezv5fh+p7z/wSj/Zk/4Uv4M8S+J7pt934mvGtrUk9LaF2Bb/AIG4AI7eT719cB/u+9cf8GdE/wCEX+EvhmxKeXJDpsBlGMYlZA8nH++zH8a6hZeMe1fomDoKjQjTXRfj1PzDNsbPGYypiJ/af4bL8C15nNLnHfuOlQLN1oEnHUV1HnE4bcafuwKriTmjzs/7uKALHmZH/wBaioGfn5aKAPEvN/zmlEmB3qsJM05XqRSLEcuXOVb6+lWoJOOv5mqMUmSOeO4xUqXPlnrxVRZBt2rHaMnj61Yil3fh6Vjwaj7/AIVchvc55rQTPgL/AILLfsxrqXjjw78R7ezZtK1CFdI1+SMfNBNHn7NPkdGeNmi3Hj9xCvVhXxha6xN/Z0Bkz9ot0EUhOMsV+Un05xmv298ceB9H+KXg3UPDuvafDquj6tF5N1aylgJRkMCCpDKysqsrKQysoZSCAR+Rf7d3wO8Mfs1/tDXPh/wlq1zq2izWMV44uLpLqawnd3WW2Z0VQduxGGcsBLhiSpr53NsE03Vjs/zPqsnzJOMaMt47PyPP9CurrXtRUySN5IPIzxivYfBfhmOdIxDGp4+Zu9eN+FNRjguvlwMnB9q9Q0b4kpoNgy28fmS7cA5xluMD2r5HEU3eyPu6GKXJds8t+P66t4O8XaheafClws6BdhbbyBwR/UVpfszfGDxUkafarfZtZf3isVjGfXcTj6gn+laPjm/s/E989zrWofYbZeVVMeY7Z9Pauh8D+MfAdlp1rYt/b0TxtkSbY3jmxz/eGDx9MV0RmlSUZrXuYxo1atXno7du57v8GNM8TeK/Gcmqa5qzf2XsAgs0jCKwwPmLEb2zkHrjkYFe5tYxfZdqybfMPljDEE5HY9a8D039pzwSklml5b31jDCvlxTrcrNtHTLLtB6ehP8AKvQ/DfjzT9Xtov7H1y0vGnVWjLHOCMAnGc4OPwzXHUjfY6pOrSX71Gz4qtGijX5n/djaCzF+AMDJOST7nmsb4W+Ar/4mfGPQ9CspIrdrid3kuJQWW3iSN3Z8AfMwAwF4BJGSo5F3xL4gaXSFmkCwNt/eLnhT9fx61k/s8ftD6L8D/wBohLrWiriTSJUi/ehfJMkkeWPHdUYD8ea0ymgq2KjCe19fkefnGMlSwkpw36H6OxhYI1WMfIg2qCckAcc1Kr7h/nmuN+HPxr8O/FG0jk0fUoZ2kGRGWG48dvX8K6xHyfbNfpaaex+W+pa8z5uelG/+LpVdWyfSnF/emSTCQk0CTI9ahMmO9AfC/wC7QBMWFFQmXafvUUAeK7sinA/X3qPcQ1OBLH9eaRN+w5jjk1Gztv8AlyPp2odvw46VCbjZnLc+9GqVySxFK3mc/TrUPibx7p/w/wDDtxquq3H2eztV3MRyznsqjjLH0/HgZNVmvNjHn9a+ZP8AgoP43uJfCl7awtI8Wl2bztEoyC5Xdk/RduPrUTqOKujSnHmdmfPX7fn/AAVT8Say8mm+G9Qm0XR97RtDZTbZpBj+NhyxP937oyPlJ5PgnxesT4E8EaDY6qsl94y1a6il1G9d87JZPkFsvOBGhZQT1dl3E4IC8X+zX8M774qfHmx1DxBaywaXpitrHlTLxO6sohDDrjeysQeCEI712H7Z0c5uBfBWVbWaOdW90cOD+lcNbVWZ6FF8sk46HL6HrQZoSpZNw2sCehHYj2rsvC/iApfXFm0qB54sxtjLKcdRXmev3K2l/wDbI1/du3mOASMHrkf19aq2njpoNdhufO+UfIT0x6D8f618/Uw/tY80T6anivYy5J9zU1Hwtd3HiLy9a1i4e3Z8gwRhcD3zmvYvhn8DPBLaabi58Ua9vVQVSMpznqM4yPwNefwx/wDCR/vtjL5nUYzmtjwz4A1LVb6OG3NxBbsRvlxtUDPPauOdZv3W7H1WXYilS95wvfrfX8T3w/Dv4bwaFD9j02XVrxlxm8O4gnqAMkY9OnXpXXfDP4K6D4Lt/wC1LO1NrqUg3ZEzssY/uAEkAfSsH4WfspX+iWtvfnVI7tJFDfNKXCZx1ruPGkf/AAhfh2QSSK0xO1Ujb5ieeR9OuK82tUm3yLY7MVioVY3tb8x3iz4gx3HhadmkRZLEhpRk/KOCc4yRxjntXD67+z/4W+N3h3R9Ql8Raj4R+JGrRlbG9AluLW5iaVhDBNbHA2gfeePY6ncSWA2mt8GtKb4leL7xbjzbjSdKmEk82Av26Y5Kxt/eCqFJyMEBc/erjP2WPiH/AMLP8bWratdwzahpcslrCqthhGZTkDnjOccdefWvoMgowjOfNvp+J8Hn9acqUWtnf52Nb9hz4neMv2bf2oL74c+MvO0u+04GXYs263l3MuyaFzw0cgIKsMdwQCGA/YX4b+Mf+Es8LQ3En+uUBXwfvccN/n0r81v2/wD4R/8ACRv8NvGWlxqniDR9VtdPJj63dncXCK8RPcK58xc9MuP4zX3p+zfNJbaatrITn7KrHd1JBA/rX1cHZ2PkZWbuj1hTuP8AOnBuahUnrnFOz/OtSSQtzR0FN3Y/z0oBwTu7jpQA9TtH3qKYcGigVzxgHH+NKren50zOKbNJsT2qSXqJK6j7rVn32o7S1F3dhAfrWHqN596j1HGJPdattz83FfL/AO2Pps3jXQfGFpYMWuLuwkjt3RsbJDb4HzZ4AavV/iz8SLfwh4YvpvMMlxHGWWGJS8kmOSAo5Jxngc5wMHNeK+B/iLp/iHXPMW4iurXVIg0Tb8iRSeBn05P1wK56lS/uo6IxtqeR+GfCVufEUniWyC/Y9a0Kzjt4wMbGRmckfUMufTaPw4v9pDwLP4z8H6lH+7LeWQgVunBA/L0rq9cuJv2afiT/AMI7fNI/h7UhLdeGb2Rt8bws26S1J6b4Wfgd4yh5IY1qu9r4qeSOPY7TZ+YL8reuD0/rXPUi2bQkt0fGWk3R1jREWZWW4jXy5Y2HKOOCD7g1zOs6XNptyJYQzLG2Sp7/AEr6G+N3wEfw/fya9o6vJHJzdwIMs2OC4H95ccgdR7jnze+8Ox6lab0ZdzDPs1ePK9CpbofRRSxVJNblb4bfFGPSY4Ydu6McEsT24wff61714P8Aim0enCT7OzDqCnYY6n2NfM8vgvzLhmXfDMp5ZeDx7dD+Ndl4A8H65rF2LeDWrq3WQBSBGpYD6/8A1q5cVRoy9+9jtwWIxMP3dr9tv1PpLwd+1DcWuoPbXDrao3yKXbhQMdx+fWjxJ8Xrz4n6rHofh8rd6tNkSSLkw20ZIBlcg/Ko9+pIAzmud8G/sjaVLbpNrmq69qHy5MbXfkIPXAiVT+BOOTXuXwv8BaT4PtlttF02y02xDb2WKMK0zf33bqx92JNea3Rg7w1Z6Vq9XSpovxN74U+ALP4V+CbWztfmKfPPMw2vcSHl5G9yfToMAcAV+Zf7OXxOn+Gvx/0+4jkkWK5vRbHDY27pl/wFfp54r1+PS9MuJGb/AFaE4J9BX5Y/s/eCW8e/tEaHpkis0ceptcz7f7kLGQ89slAM/wC1XqZA3KVRvrb9Tx+Io8tOml5/ofsN4hlj8feKPh/pinzNsr6lMNv3EiQ7WJ7/ALx4/wAQD1zX1D8L71fDesWqsHMcsXksW/gBK4P5181fsyeGrnxN8QtQ1p2/0Kzs7fTLM43CNxlpSAfXMY9ipr6A02Uvq7bZVWGILGSwzn5sk/hxX1SlqfGSPblUD86cDmq9lew30PmQyRyxt0ZTmrAOR/T0rYkcT83T8u9Iw+b6c0LgClzn8s/SqECD5elFAIUc9TzRQPQ8TMoVc1RvrxY42ZiqqOck8CsHxr41j0uE28c3l3UgwCMfux688Z9K5O+aS/t991cSTAno0m/k4+6FyOmfTvWTqJOyKjHqdFqvjCF9wtv9II43A7Y/++u/4Zrkdc1a51ncDceXGoPyRcBz+JBOfwFMczrKqorGMLuC7G4X2OP85qlPi2mYSR+Y0nVcHj9e34dKy5m9wukrI57W/DggspJPN2L1d/m3A+pOOeK+SPjpBqfwU8aS6pocKzWNxMZZrRnxuLcs0bD7hJ5IwQSc4zzX2pqUj3UJSSGFtufvPu3V5d+0P8G4/HHh3zIoxJJAABtUsPpgDr65NTKF1oVGprZnm2k+PfCv7WvweuPDOtTSW+Nk1lOdi3Wm3SD5GBIIV1yRgnaysy8oxJ8xHwp8e/CjV5LWazuNWsYZClvqenjfDdKDkFowS8T44KP0YEAsBuPnfjbwXqHgLxTNdaW01rcxj5wqkBx3Ug8MP89a63wH+27rHgyO30/XLQ3WnzYi+1xyFlU42gOp5HGBnce3G0ADOMrqzNOV/ZPSdM1ttU0cfatNvoTIpAldDz128EDvx1/wry3x98LYtMluNQ06MyWv+tuoUX/j3B5MgH931xwOvTOPXvAn7TPhW/8AEyMJbW3vrkhSJV2zSjGCpYYaTjHUenFe1aN4c8I/EC1jmWGzF0f44Jdky/UKQc9+R65HWsq9CFaPKzowuLq4afOtV1Pz7vNDRZfMUeYvaum+H1pJpes200aqyqwJRuP1rvvj/wDsta58IvHN1Jpdjcan4evHE1pJbx7niDHmIoOcq2RwD8u0nGcVyPhfxRZ2OpfZ7rEU8bFXjkG10I4IIPIIPBB6EV81iKM4XjJH22FxFKqlODR7t4a1KPUVVpFz/sfwj8K7rS7qHTrHfI/K/wAIHP0rybwz4ys7SBWiePGMZEgq34o+IV1dxxaXo9pNe395/q4ouWPueyjnlmOB615vs5SfKtz0JVFFc0tkZP7TPxg/sfw1fRwSATTIyKoP3QRXzL/wTl0WTxH+0veXENubqa3sJ2t4/wDnpNJKioPxG78K+qLX9il/Fd9bv401Ca8ub4b49I0pjzkj5XkxvOc87AuOfm719Ufsv/sceGP2f3OrW+iWGk3zQfZreztkBW1Xkl3/AIpJDnlmJOBgHqT9TleClQg3LdnxmdZlCvNKnqkei/C7wbH8Nvh9a2sUUayKmWMZIZpmJLs31JJrrtOsfNitwqyFmy77vvDj0rOsrltYvsxxlYowdnHJB4JPt1H51v2c8YG7aYtqFR9PTPqP6V7PLZHzUpXZveDdbPh/UY5JpHW3nbY+fun3x9e/WvSbS7jvIVkikWRG5BU5zXzzrGu3Gp3ax6dcW6x225nM4/dysOq5ByuP72Djn5TV7SfilN4UlVrpp9Nfo7N+9tn9/MHygH/a2n2HFaRbQeR79ndTg+FNcb4Z+LFlq0S+cyRyMPvKcq1dVFdrcxho2WRW6Fe9aX7D1LBbHbNFQ7j6GiqC/c+FZNWbVtftZpG+WSN3kZ+AzfKQB1+Y4P8A9ft0Caet3aR7iGG0h2KnCEdATtI6j1H1rhy4uvAMOpSSSRvpd6DNx8zK2YuRjjDPnNb/AIC1j+3/ALdb7rcyxyLJG2GVwHH6gtuHJ/xrmXmW2aLQMLeNcyDaNxHG0D3x19ec1Vvzb/dbcm4HADfKDnO7pjPtWoLR1RUkZ9qvwBsUx5x3P4ZGaz9UgkteskQO7JRlz7cemOvFNx1uZqWhDaXBnt2VWba33sHceOmTjAz6VEzqJ5IvMmZWUsZEAUMQfcZ//X3qo9tNaS4huPMK/MWVgq5PTOVOOtZU+sQwySRLumkU5zNufGePooH4jOKqKEzzj43/AAEXxYJLmxhh+0ZJZmbBYdDwQP0zXy547+EcmlXstrdWsULFsPEyfLID3zj8jX3vaXjata7pGZmU4ZCc54/LPX8+lcH8X/hVZazaW88Vt8uCWLxlcKcfN0z6VMqd9UaxrcujPg/X/hck1pImJrq3hG1htHnW/seu5fQ9fr22L7w9q3wv+Bui+JPDN7fLeR6g1vKI7iRFeL5jyu4A4IAwQcYPGK9c+JnwnutHzdRxzRRRnMbr83l8c+vGOoIxVPxPo63/AOzEsjedN9n1j70TeW2DG/IBPrjjuO2K5qkbbnTTkpbGL8Lf+Ci3iTw5py2uuaLDrVl5iq4mt0bkA4b5QmCPUD9a03/ap8L/ABa8aapdab4XtbdbSUaqHuHMbXEkNvGGESun+tMxRdqli8ZbCjcWHmejeHJvENuPmWQwzRtskASQjOPb19O/Wux+EPwg0g6c0mqWNwNR0bVby+snjk+XdIsa4cd/9Qpz0B4yM4LjTW6Dmdj2Dwx+0V4b8SWV1NeaNGtvFcudMhURfaBEQApG0yIu8gMVD7RnOTXrHhv4k/D/AELw7qGqJb6jE1natcvDHBErT7FL7Wded3Bxwc5r877H4DX0EdvNo+oappshjQYFyYUzjB4XOR9c16J4OsPGWgwmG417TdWhxt8ol45nI/hDLgN+Kk1Ps7e8inJtcrPvD9n/AOMt1qOqxSX3hbStEsdX0tNY07ULK4M3nRmRl8ubcAVlUBWIBZcOuGJyB6fbaxN4wuC0MU1vCrFXMpxJMobGMZyozuHGD1+71Py4nxTHw/8Ag18PJJNOuLjzBew7bcKy2/lvDtBBwCPmODjoD0zXceEP2txMkaQ2syQhAGLks6dxk/xdhzmtqdktTnqRd9D6W0eAWEGxVjhaFVB24XCY7dBgemBn0HblfEXxO+36lJpek7rpom2XlxGPki9VDDgyeuOnfniuBj+K+ofEiT7OrXGm6PM+2eaJvMnkG3lQVPyA+nX37V2nhex0vQ7eCOxjijhVB+683dj3I6g/UVvvqzmemiOh8N3GyxSNfKhQfMMsXwPTNdBCvlbVkkheLP3g3XAz7YrAsb1FV1TyWiAyFH8XPqOhzzV4akpkPlySMWI3DbuwcenaiV73AkutAtorhZ7eOS1kb5mkgYx/N0+YD5W+jAitbw9491jwhOzMPt1rH97bgSfio4b/AIDg8YANZ8F9JtWGGeJvLLHY7YL/AEzVq1VmXzJraMR525JwR+VL0Hc9O0b4o6VqunRz+cE3jkAFsH8KK8sMljduzbinOPlkXn9f84oo9ox3PnvweN3gfWbf+BrCZ8nluVYEc9uBXOfCHXbiw+MLQqyvHdaTGZBIN2TkH+bE0UUpfCUup71e6ar28cjO8hZAWDhWDZBznI9qxLm2SCzDRrsfONw5bHHc0UU5GMStHAtzawyPuZmVm57EcCuf+J+mRnRftC/u5Gg3nYAMkevGT170UUR2A890XxHdSa0qNICIULDjrxnBHTHt0rt7uD7DaRSxMVaWJcjAwueuOP06UUVMWy5bnnHi2GPUvD98sscZVJHTAXAIHqP8KyPDHhi0174bXtpMn7lbuJkCgfIRFjjII9evqaKKmprJXNKXws57xL8I9CtfB99dCzVplmiIZscHeORxx+GK5fwdbxw6w8CoP3q3U2/J3KRNLHx2xt9QefbiiilIuk9TOsfDML6Zuaa4fy/lClhtxgdsVd8O+GrQanInl5jI5Q/d6DtRRSZV3c9M/sW3l+E/htXTzFt9TvVQNzgM65H6D8qseHNFtbjWXt2iXZGCwKnaeDnHHH5CiilTFW3PZNO8OWujaXaSW67d2OMDjHvjP5mrmh3bX+nW93IAZnUknJ4xwADnPH1oorpl8RzI6KxuNsULMkchLE/Mg449eveti41KRTCw2jaGCjH3cf8A6+9FFLqLqWrWVpNOkkPqV2kBl6e9b2jRm70mFpJJG8tSQpb5TgjGR/k0UU5AZdzq8n2qQbIsBuOP/r0UUUIUtz//2Q==)

José Pinto Eduardo Costa Luís Lopes Ricardo Carvalho

A84590 A85735 A85367 A84261

## Introdução

No âmbito da Unidade Curricular de Computação Gráfica, foi-nos proposto o desenvolvimento de um mecanismo 3D baseado num cenário gráfico com o auxílio de duas ferramentas utilizadas, também, nas aulas práticas, sendo elas OpenGL e C++.

Esta segunda fase foca-se na criação de cenários hierárquicos usando transformações geométricas. Para tal foi necessário alterar o ficheiro XML, bem como a forma como lemos e interpretamos a sua informação. Para além disto foi também realizada uma representação do sistema solar.