![A close up of a device

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDgRXhpZgAATU0AKgAAAAgABAE7AAIAAAAHAAAISodpAAQAAAABAAAIUpydAAEAAAAOAAAQyuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEphcnZpcwAAAAWQAwACAAAAFAAAEKCQBAACAAAAFAAAELSSkQACAAAAAzU5AACSkgACAAAAAzU5AADqHAAHAAAIDAAACJQAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA2OjA0IDE4OjM4OjIzADIwMjA6MDY6MDQgMTg6Mzg6MjMAAABKAGEAcgB2AGkAcwAAAP/hCxlodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIwLTA2LTA0VDE4OjM4OjIzLjU4ODwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KYXJ2aXM8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgAwgC/AwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A+kaKKKACqOtazZeHtFutV1WUxWdrGZJXCltqj2HNXq4n4xf8kf8AEn/Xk/8AKgDIH7Qnw6I41iY/9ucv/wATS/8ADQfw7/6C83/gHL/8TXB+AfCUvixIbODU10uCz0q1kCw2EEhdn3ZJLqTniu1/4UxP/wBDXN/4KrX/AOIoAn/4aD+Hf/QXm/8AAOX/AOJo/wCGg/h3/wBBeb/wDl/+JrMb4W26XTW0njYpMvVG0y1BH5pVpPg3JIu6PxdIw9V0y1P/ALJQBZ/4aD+Hf/QXm/8AAOX/AOJo/wCGg/h3/wBBeb/wDl/+JqD/AIUxP/0Nk3/grtf/AIij/hTE/wD0Nc3/AIK7X/4igCf/AIaD+Hf/AEF5v/AOX/4mj/hoP4d/9Beb/wAA5f8A4moP+FMT/wDQ2Tf+Cu1/+Io/4UxP/wBDZN/4KrX/AOIoAn/4aD+Hf/QXm/8AAOX/AOJo/wCGg/h3/wBBeb/wDl/+JqD/AIUxP/0Nc3/grtf/AIij/hS8/wD0Nc3/AIKrX/4igCf/AIaD+Hf/AEGJv/AOX/4mj/hoP4d/9Bib/wAA5f8A4moP+FMT/wDQ1zf+Cq1/+Io/4UvP/wBDZN/4KrX/AOIoAn/4aD+Hf/QXm/8AAOX/AOJo/wCGg/h3/wBBib/wDl/+JqpL8HjCMzeMHjH+1ploP/ZKhtvhVDezPFaeNGmdBlgml2px/wCOUAaP/DQfw7/6DE3/AIBy/wDxNKn7QPw7eREXWJdzsFGbSUcn/gNV/wDhTE//AENc3/gqtf8A4ivJ/ibpEugrqej3F2moCzvrB4bhrSKJ18wOWGUUccCgD6pRg6K68hhkU6orX/j0h/3F/lUtABRRRQAUUUUAFcT8Yv8Akj/iT/rxf+VdtXE/GL/kj/iT/rxf+VAHJfA//j8n/wCwPY/+z17HXjnwP/4/J/8AsD2P/s9ex0AZmqS2sbKLrTZLsMPvJAHx+dYj/wBhg5Sz1CybOcxRuuPyyK66sfWNDW/DzQ5+0nAG+Vwn5KR2oAy1vRFk2muXa+i3Vqz/AK7acPE11CQHksrodypeI/8AjwxWXcWUkMrQsDLKhwRDbXDD/vosAfzqhcxBJMTKscn9yTYrf9872b9KAOqXxnZJ/wAfkUkPurK6/mD/AErD8TeJrfVbvT7LR9QeaB2P2yK3jLNg8Jk5BA3YGO/4Vyt1iacx2dqbqf8A55ww7j/6CMfjUXhWC807xVNJe6bLAH8rCxQM7HZMN5O0Y4+poA7fwv41sU0IJq+pmW7jkYBXj2yGMnMZI90KnPvWm3jGB/8Aj0ty4/vSyrGP6mvJIdO1ObXLiSDR5ZlWOIMDDiRSkMStlWAzgkdM9a27BohIY2jWKUfejePaw/DYaAO5PiG7uOl3ZWoz/DHJK38sUjXUErH7XrOozZHKQW7Rj9FrBtoDIp+zRmUD73kqsmP++JAf0rQtNMmvWMVuVVwNxWaG4i/UtigC9CdDRgy6Ve3LD+KSFn/9CNdBp0kMtuWgs3tFzjY8YQn3wKZpmlw6bGfK373Ub90jMM+2av0AFfNHxx/5GTX/APr60v8A9Aevpevmj44/8jJr/wD19aX/AOgPQB9JWv8Ax6Q/7i/yqWorX/j0h/3F/lUtABRRRQAUUUUAFcT8Yv8Akj/iT/ryf+VdtXE/GL/kj/iT/ryf+VAHJfA//j8n/wCwPY/+z17HXjnwP/4/J/8AsD2P/s9ex0AFFFFACEBlIIyDwR61myeHNJkjVPsUaRg7ikY2Kx/2gOv41p0UAZ15plqNDurS3jW2jeFl/cqFK8dq81uLDQdAtZ9c8Q3/ANks4tPtpZZFtEbDSSOOFCE8nHb616rd/wDHlP8A9c2/lXnOv69B4Z8J3eq3elf2xDDpVirWW0N5m6V16EEcZz07UAFt4csBqT31hdF42msnikSGNdyyEcghQRkY/SvQb3S7HUU23trFMB03qCR9D2rl4boXxa7ERhE8mnSCI/wbiDt/DOK7OgDPt9D063MTJaozxHMcknzuv/Ajk1oUUUAFFFFABXzR8cf+Rk1//r60v/0B6+l6+aPjj/yMmv8A/X1pf/oD0AfSVr/x6Q/7i/yqWorX/j0h/wCua/yqWgAooooAKKKKACuJ+MX/ACR/xJ/15P8Ayrtq4n4xf8kf8Sf9eT/yoA5L4H/8fk//AGB7H/2evY68c+B//H5P/wBgex/9nr2OgAooooAKiurhbS0luHBKxIXIA5IAzUtIQCMEZB6g0AcdfeMzdae6afbBZXAGZJkO0HrkZ64zxWXZandWMgeO4RiLeO3w0afdQsQfv9fmNbFroj32tX99byW9sEla38sWqMGCngnPetH+wrr/AJ+rb/wCSgDk7jU7ySWadbhDJI8Um3YgGYzlR9+t6DxvGIoFu7QiZgokEcqNhjgEgA5xmr39hXX/AD9W3/gElU9P0oab4rYXPkXLXcJkD/Z1UoVIAAx25JoA6miiigAooooAK+aPjj/yMmv/APX1pf8A6A9fS9fNHxx/5GTX/wDr60v/ANAegD6Stf8Aj0h/3F/lUtRWv/HpD/uL/KpaACiiigAooooAK4n4xf8AJH/En/Xk/wDKu2rifjF/yR/xJ/14v/KgDkvgf/x+T/8AYHsf/Z69jrxz4H/8fk//AGB7H/2evY6ACiiigAooooA523uHg8N6xdwttkWW5dGxnBGcGq+sz23hzQH1jXfEV5a2cIUyynBCliAOApPUikQ/8UDqLf8APQTH8yaf4607w/qngG6s/GN2LPR5Fi8+Yy+Xtw6lfm7fMAKAFv0uLTR11Oz1i6mX5JF34KupI7Y7g1fvBt8Vaa396KVf0zUOrxQR+CHSzbfbx2y+U2c7lAGDnvxVjUcLrukt6vIv5oaANWiiigAooooAK+afjj/yMmv/APX1pf8A6A9fS1fNPxx/5GTX/wDr60v/ANAegD6Stf8Aj0h/3F/lUtRWv/HpD/uL/KpaACiiigAooooAK4n4xf8AJH/En/Xk/wDKu2rifjF/yR/xJ/15P/KgDkvgf/x+T/8AYHsf/Z69jrxz4H/8fk//AGB7H/2eukvft0Gs3saahPJGbjbChZi2SuSAFHQUAd/RXm51K7s9T06aa8uGg82USRJIVYsgA2sGHT5s/gK6RvGEaRJK1hKI5M7GMi4bHBxz2oA6SkJwpJ7Vzj+MI440eSwlVJASjGRcMB1I5qO78YpBas0ljMm6IshMi/MMdRzQA1ht+HD/AO3H/N6f460HSvEvgO70nX702FhOI/NuA6rs2urDk8ckAfjTX5+HMHGN8cXB95F/xqTx34RTxx4HvPD0l01ot0I8zKu4rtdW6f8AAaALWqQR2/gieC3fzIorLYjZzuAXANGqNm70WX1nA/NaffWYtPB0tmG3iGz8oNjrtXGf0qjrd2tpoOk3zqXEc0DEA4zkUAdNRXN/8JhGYTMLGXyw20v5i4B9OvWj/hMI/IE32GXyi2wP5i4z6detAHSUVzT+L4/swlNjMsUhKrJ5i4JHUDnqK5nTp9RmtIyL24maSSURjezOVRsZbaMelAHpdfNHxx/5GTX/APr60v8A9AevZvDa3k2vLLNfSvB9mLpEHJDHdtO4EZyMV4z8cf8AkZNf/wCvrS//AEB6APpK1/49If8AcX+VS1Fa/wDHpD/uL/KpaACiiigAooooAK4n4xf8kf8AEn/Xi/8AKu2rjPi7E03wi8SqgyfsEh/IZoA4n4L3ltaXk32q4ih3aPZY8xwufv8ArXZW+o2B8SJKb23wb2c580dAoArzr4Stp8s0k+p3v2OBNCtJGlafykUBnUknp1r0T+1fA3/Q42H/AINo/wD4qgDK1cR6ve3Nlp+tQafPJNcmK7yr+XkxHODxyMio7i3TUrWDT7DXbfT7lWvsXYCNjF1GTweBuANUbrxbZx+NrLTbCWz1DTLy6S0jltNZE1yzMpJk8tc4RcYJP1rtNTi8NaLKkesa/HYSSKWRbrUBEWHcjcRmgDmpYY9UtbW3sdbt9OliWZzNhG3KLjJXB6bhUF/bjVLaH+z9dg077Lb+ZIAEbzkBb93z0zWxea14NgsppbTxTYXE6ITHD/bMa727DO7iqPgHUl8Wz6jbXqok1iUzLp2oNcQMGGdu/wDvDuBQB0N1qOnjwbbwre2+79wNolXj94ma5X45+Nb/AMP/AA8juPCWpIl9LexxM9uwd1TaxOMdOVHNdBLqHgqGVopvFtnHIh2sj6qgKkdiN1c54u8UaNptjHJ4b1fSNUYB5J/tOuqixqq5wACSzN0GKAOi8K+Jk1r4Wadd6xfW/wBvudPBnDOFYvtwcjsadrN/aXfgeyhh1K3inZYAH3qxjOBzg+lPsF0afwlY69qF5PpVrdW8c5F5d+WIt4BCkkgZ5xUP9q+Bv+hwsP8Awbx//FUAYMFp9m046Tc+IILi++0RqdQwg+bymw+3pxTltg+ntpI16Bb37QyDUcJw/kAeZt6darWfim2u/H1tosLWt3YXkrxW89jq/nzDaufMdFyFQ9PWuv1H/hF9HuRb6t4ihsZyu4R3OorGxHrhiDQBzctul5ZppdrrsFrdia4UX2EOGAjy+3p82D+dbXh6+sLfVoke+t/3SXILb1UE+YnP48mqeq674TtdKuZ9L8SaffXiRkw251qNBI3YFi3FM8BXsPi2x1B7wiKXT7jyJJ7G+aa2l+UNlHPXGcH3oAv6DqtlFq8G+8gVSk6EmQD/AJaZFeOfGueG58Qa9JbypKn2rTBuRgR91+4r2RtT8EIxVvF9irKcEHVkBB/76rw74oSWV5qmrto96l9bTanp0Mc0cwlViEbOGHXrQB9R2v8Ax6Q/7i/yqWorcYtYh6IP5VLQAUUUUAFFFFABWT4q0/8AtXwjqthjP2i0kj/NTWtSMoZSrcgjBoA+bPgrf6eJ9Ih1gQ/Z7rTbjT51ucbC0UocA546Ma9A8Z6n4Z8Mwpc6X4N0LV7SNDLdTiW3i8pQcYVSCXc9QOPrXk01hZ+HPG2u6VrNpHc2ek6wmpiCaMMj20p2ycHsAwP/AAGvVoNT+C9vMk0FpoaSIQyOLIcHsR8tAHbWNp4U0tba/t7HS9LlniDxt5UcL7SOnY0zWp/CuoQtcX8Wk6rPBG3lRytE7N32qW6ZNeZ/EPxlomt3lrPo1r4e19bdFVbS8tXluJ2L48uPjC8c5Oee1ddrnh/4YeGobZ9e0DRrP7Tnyw9mpyRjPQdsigCp4Ln8PeJbzUbLVfBOjaXd2CRyusRhuY9j5wC6qAGGORXaWN94a0y38jTbnTLSLOfLgeNFz9BXI2fjX4Z6PpdxY6NNplpDMDvgig2JIcY+bA5rmfh3peg+Jtdv7PUfC3hm8toYVlS706wKxoxOPKJYfMcc5H5UAbHjDWvDmhajHPD4O0XVdPZkN1eiWASBnfbhI8FpGGckcV18uh+CrKSM3Gl6JbSEB1EkESN7HkVyyah8INF1TfFaaLbXlrJwy2YDRsPQ7etYnxD8V+EddWC70o+G768iRhLNqto8zbFBKoigZJLH14z3oA9I17WNEl0G6VlsNYKRlksGmixMw5C/McDnua5jwXJ4Z8TW+pjU/B+jaZc6XMI7kIIZ4eV3ArIFAPHX0psGhfD+z8F6brnijwnpGktdwRNLFJZqfLkZclemamt/GvwwtNGk0m1n02HT5QRJax2+2N89cqBg0AdJYDwfpUxl0z+xrORhgvB5SEj6iuS8V+KdITxdZRX/AIV03VtPuJ4bP+03uIJJC8hwAkWCzKpPPI9gcVzHhi38Oa74+Gmw+GvC+oaXMsjqbKwO+1VcbTI7DB3egxiuwkufhZ4Q18r9j0jTtStT95LQB4yR2IHFAG9caD4HtJvKutL0KGTGSkkESnH0Io1DXdK0Hw9KPDtvYXjxjEWn29xFCrk+54A9a4Xxp4j+H+uwPd2P/CO3esOUT7TqlqZFVAeScDLYHQZFW/Cuh+Db3wAviDxN4S0SzCNIHlSxCxyIrECRVIyFYDIBoA1/BUPhvxhpVxdXHhHSbS6trl7edEiinjLjqVkCgMOa8Z1m1t9S+IGl6fpsMUVtf+KXljihQKoig2rwB/utXrlz8TvAnh7wvcw+H7y0h8mF/s1rbRbAXxwAAMcnFed/C7SH1P4yW3mAMnhvTf3zDp9plJZv1ZqAPowDAAHaloooAKKKKACiiigAooooA8J+OmjJpHinSPF5j3WNwp03U8D/AJZvwGP0zXdfC7UYNU8L/wBn3scMl/pL/ZZmKDMigfI/0ZcGuj8WeHLTxZ4WvtFv1BiuoioOPut2P4GvnPwv4k13wLql1C0SPq+ir9jv4JyQtxa5/dzcc/Jnk+hoA9s1DxRrGmahMkHgSeWGKQrHcrPEgcdiM9M1h+Kb7xL4q0+Kzm8HazZoknmE217EjScEBS3UDJB49Kj8QaT438b6bbC/0TQpbcAyQNFqUoQllwGIA+bHUV2HkeIPDfgCwtdPe01LUrKCOOea/mMaOFXDOW/CgCvpUGs6B8OrA6npa61rcMSrPFFsDOSf7x4JAxk98VSi8a+IkZooPAF2rLyyJdRAj6gGq2l+KvHut2xuNIsPDF7CrbS8Gou4B9OBVbwt4K8R2/j1df1S3s9OT941wLa7kma5ZugO7gKO1AFXRdH8T3/xGg1ebTdQ06zeSR72O+uI5ImjK/JHGi9CDzmup17XdS0jU5IrDwXJqFtGoYXcckSKeMnryMHiqviPxV4m0zxKum6fF4eKzkfZUvL8xzS/8B+tZ2u2XxA8SaYdP1Xw/ob2zSK7Imoypv2nIBIHI9R3oATXde8TeIdElsP+EM1a1SfH7+2u4d4GcnBPTI4z71p+C9M1jRPA851mwa8vElkktbSR1eZYv4I2foW681N4b0rWfBvw2e3mmtJ7+EyzIk0xWCEMxYR7zztUHGTWbpnifx9rNoLrSdO8M3kGSPMg1B2GfTgUATp4z8Qwy+XH8P7uN2Gdq3MIJH0zXPX9h4t8SeMrHUoNF1PSHS4h3me6jNukKn94Cg5YsM9asDwX4u1jxrZ61qlpp+mSx3CSzXVteySuUUEeWqngA966TxT4o1zTvElvpWhDQpZJ4wVhvr0xTM3PAUdRQBc8R6lfaPcwx6X4SfV43Tc8sLRoEOeh3fnWFd+LfE2paVNbweCNQjSZCizQ3UJKdsjnHFGp/wDCyNW0u50+70PQxBcxmOQxahIjYIwcEDIqPw1aTfDHwlrWp+I3gt4ZJhLBp9tI0iQnaFCIW5JZufqaAPMNYudQ0OG403W0nh0+3ZdTkgvZlmmRUHyqzDpvkwdvoDXo/wAB/Dk+m+C5db1NSNQ16dryUt1Cn7o/KvMINM1D4kfENNDuSWMk66hr0inKxAf6u3z/ALI4x6k19OQQx21vHBAoSONQqqOwHQUASUUUUAFFFFABRRRQAVW1C9XTtPmu3hmmWFSxSBN7kD0Hc+1WaKAOCn+J5bxPZaDYeHr6W+un5jndYmijxkyso3ELjv3PFYXxj8B3WoCHxj4UjVta0xT5sIXIvIf4kI78Z47irPiPTtR8I69dXvhm3+06r4jlEI1XUpsxaegH3eTnHUhehNaNjqGj/DHTrGw1nXbvU7zVZ97ySt5jM7ctIEH3Y/0FAHmPgnxxqwtbGy0PxBBpehXMhihe9tftBsZz/wAu0hLAqOuxjwRx2r1G68M+Pr6zltbzxZpM9vOhSSN9GBV1IwQf3nQiuJ+JXwxubC7ufGHgC1ivYbyP/ibaIRmK+jPJZQO/fjkHkc1keGPiH9r8OLp0+uaxFoUTqDf2rr/aGkdvKuAVbfF2EoHbBweAAereEPA134WttXlGpQSajqWzDw2gigh2LtTbGD78881zOn+IPEmqeIpdDsviBpr38RZSp0JlViv3grl8MR3ANbdn4Fk1CzjurH4keKbi3lUNHLFeQMrD1BEVaGj/AA8t9M12DV77XdZ1q5tlZbf+0Z0ZIt3UhURRk+pzQBg3/wAM9f17UYp/EOv6bMBJE0sltpSxTusbblUSFiVGR2rb8bS67pVrLq1n4nstG0m0gBnFxp5uGznGQQwPOQAAOtYvj6/06z8URR33ivxVpPmIm9dLVfs1uGbarSMY225PHWtIfDm7dQf+FgeLGU8jN1AQf/INAGLpcfijx1oM5tfGWlXtk7Nb3EE+hFCrD7yOjOCDyOD610PhXwTfeF9J1YQapC+qalIJPOS0CQRMF2rtiB6Y6881q+G/Ctn4V0u6t7W6vLmW6la4uby7l3zSyEAFicAcAAAAAcVwGhW9l4k1ufTbHx/43huEDOguDHEsyK21mjLQ/MAeKAJfEWu+JvCl1b2+u+P9Nt5LgblC6Ez7VzjcxVztXPGTVqT4bazrusWmpa9r+nXKLcQ3Ly2mlrFNN5Z3IPM3EgfTtWhc/CsX8LW+q+M/FF/aSYEtvNdRBZVznaxWIHB9iK0/HD6XpnhNf7Q8Q3nh21tiu2exkVZXwMCNQytuz6AZ4oAPFNv4mimlv9L8T6fpGmQw7pBdWIl24yWYuWHGP5V4R4j8aeItbnskubldWvp5iNAs4rXyfNJ4F3JHk4Uc7AevXtVfxBr2pz6iunXF7rmuyXTqdM8NahMsksjdVmuxGqhV7iHqcAsQOvr3wv8AhfJ4Zlm8R+K5xqPii+GZpjgrbKR/q07DjjI4wMDjqAa3wx8BQ+APC3l3Mgm1O6Pn6hdMeXc8nn0Fb2l68mpareWgjCLCFeCVXDC4jP8AGCPcEY9q4z4heMtgOnww3R0aN1TV9QtUD+QjdBtPJQ8hmHQUtt8LPDm+w1z4eXz6Hcblc3GnzF4riE8spRiV5HT0NAHpVFIo2qASTgdT3paACiiigAooooAKKKKAK97Y22o2b2t9BHPC4+ZJUDKfwPFeZQeFLXw74uuNU8T31w8krsI9SeRFR4SMLbBB93H+yOfWvVajmgiuECzIrgHK7gDtPqPegDzH4f8Aii8n1jWbXTbG6utEg1L7JZqkO1bWJVGTuY8jd/D1FHjz4PW2vak/iLwbeDQ/Eced0sXEVwe6yKOOe/HPcGrFzoes+CfD+qRaVeomnq02oTXsuWnkJbcY8AcEjjd+lc1pviXU/Anwb0u9t0a91e+J1e9Ezl9kDyDJYnn7rIo9/oaAOIt/EOveAdRl07VUk8KXc2Q6hWbTbvPG5ccwsfVePYV0+i6loU0UY8S694s0lpPu3S6uZrWT3WVRjH1xXqmq6v4V1s3Gk+II7eS3V1i3XaDy3dl3BVY/xYrhdU+AdvAz3fw+1+40Yy/MbZm823k/4Ce350Ab9t4D8LalDDPN4p1bVrLesnk3Or+ZDLg5G5eMjIBxWz41isNQ8PSOmpX6PZq0scGkXoilnIHCe9eE618N/Genhxqvg601aPOTc6NObd29yo4z+Fc3FBY6PMVu9F8QWPql3Yi5UH/eBBoA9o8GeHrbxUmow3Os+K7C+02dYbiH+2vNUFlDqVdRg8H8DXS22keE/AN7JrGqa7cS3Zj8oT6rf+a6JnJVQemT6CvC9L1jWWtGsPDemeKZ7d2LeTawJZRsx7kgFvxzW5pfw0+IGs3AmXS9N8PBut1eObu5H4vnB/CgC9428U2d/cXOo6HquvWUEpJN9d6k1raJ/wBc48bn+gFczoFj4p8c30S+FjfX8kPyN4m1onbAO/kIchT/ALXLfSvVfD/wF0GzvE1HxVd3PiPUBzvvHPlqfZfSu7u9Z03RLK3hsolkDzfZoILUDb5mCQvHC9DQBgeAfhjofw8tJLpWN5qswLXeqXRzI5PJwT90fz7mqfjL4j2GnTWMMF4v9nXSyGS9gge4V2UgGEbOVYgnn2rEbV7z4oaBfWqagdLvU3PDZBSPss8MmPKnbowbK/L6etVfhzb+JbqPUfsdlY2VrfXj/b40UwyafcABW8sEbWHy5GPWgC54Fu5bbUFg8Kxza34Q1OSRPKuARLpsg5dGD8lDnofWvSPDvhnS/C2ntZaLbC3heRpWAPVicn8PapdF0aDRbN4YWaWSWQyzzPjdK56scfStGgAooooAKKKKACiiigAooooAKKKKAEZQ6lWAKkYII61y/iDwPZapoGvWdkot7jVrH7LvPKx7VYJgdgC2cCupooA8cvNHi0jxRoWn69FONB0G1a7kupYi4v7wjGeM8jk8/TtWPD4w1nwzpWnfabmTR4NU1Se5jSaIubaxA6lDyMnGB2zXvTIrjDqGHoRmub8Q+A9E8SzT3GoQv9pmtHtPNVz8qN6Dp1waAMLSviHqf9n+G11jRyt9rlzLDHGG2EInIlIPQFece9dZDr2lX/iO80GOVZb6yhjmniIyEV87fx4/UVzMvgrV4Ne0fVIr+3vzounSW1tDcIY98rAASMwz2GOBWfoPg7WvD/xQtNZYS3tve6Y8Go3DOnyTmTzAQOCRncO+MjtQB2es+JNP8PXWm2t6sofUrgWtv5aZUyHoCe3f8q5/xL8Qb3Q5rgWnh+a+W0uooZljlG9lcEhkHfoeKvfEHw1e+JNBtxpDRLqOn3kV7a+cSFZ0bOCR0yMjPvVd/Dmp64NSutRSHTLi8SFYo0kM/lGMk7ycLk80AcZr3jG58S6Bq2o+HdVmlGlPDffZIx5bGEH97DIvXIwevpV2Lw1dQarpOteCXW68PareQ3d3Z78/Z3/56xnPTnBFd1H4M0RdWudUNlELy8t/s92yDatwv+0vQ1sWdnb2FpHbWUEcEEYwkcahVUewoA5R/h3Zy+LtT1Y3U0dpqYhe5sIjtSWaMnEjHrnp064rsERIwRGqqCSSAMc+tLRQAtFJRQAtFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAlFFFAC0UUUAHpSUUUALSUUUALRRRQAUUUUAf/Z)

Programming Language Translation Project Report

Java Compiler

Mayar El Mahdy – 4639.

El Zahraa Emara – 4558.

Contents

Phase one ---------------------------------------------------------------------------------------------------- 3

Phase Two -------------------------------------------------------------------------------------------------- 11

Phase Three ------------------------------------------------------------------------------------------------ 30

Phase One  
Lexical Analyzer Generator

**Part One: Data Structures used:**

1-Stack: Used this data structure in order to help in implementing the NFA automata, by pushing the characters of the Regular expression and popping them when I find either of these cases:

* When the character read is ‘(‘, It will pop the elements from the stack
* When the expression is all pushed in the stack, then pop the expression and start building the nodes.
* When the character is ‘)’ then pop the elements from the stack.



**Figure 1 Stack**

2- ArrayList : Used the array list to add strings into a list , this was used several times in the code like in the class LexicalRules when reading the input file I simple add the Line I read into an ArrayList to handle it.

3- 2D arrays: This helps in storing the transition table.

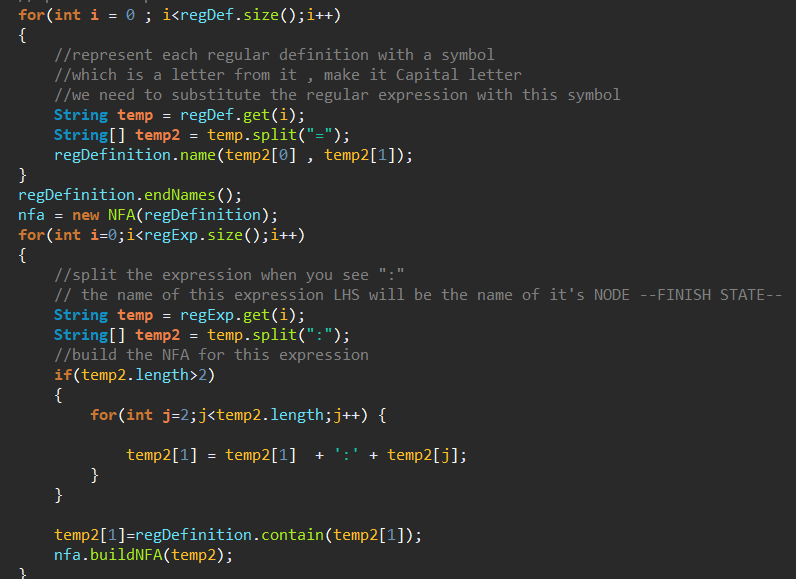
**Part two: Algorithms & Techniques used:**

1- Implemented an array of Nodes that was used in building the automata, it is a **graph** but implemented from scratch in order to add more functions to the nodes present.

2- The 2D array that was mentioned in the data structures section.

3- Split() , used this algorithm to split when I see the occurrence of a certain String

**For example:**

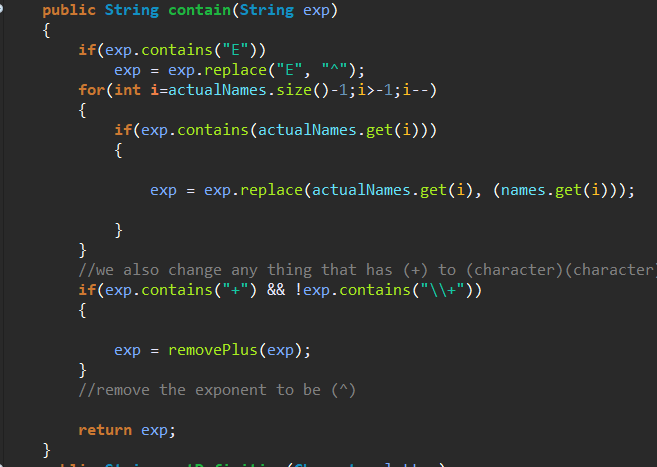


**Figure 2 Split()**

Here I split the regular expression and the regular definition whenever I find ( :) , (=).

4-replace() , Used this algorithm to replace a certain String with another one .

**For example:**

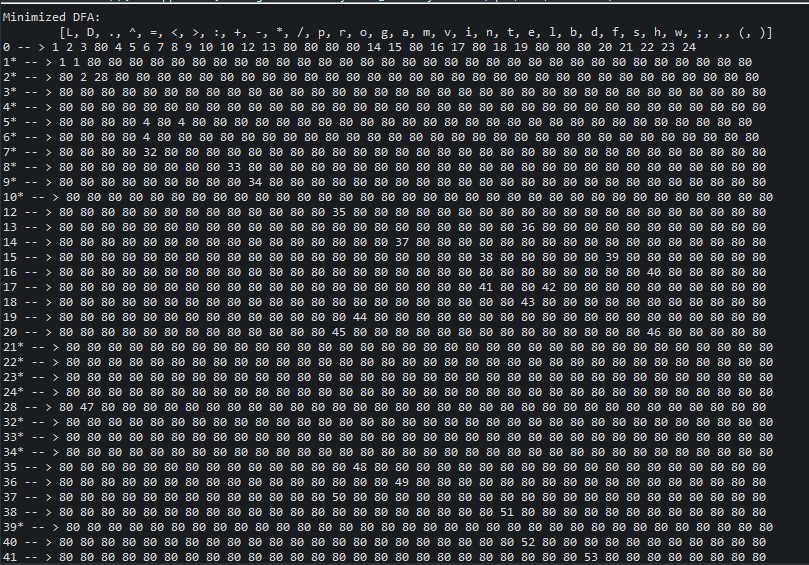


**Figure 3 replace( ) demonstration**

In the figure above, each regular expression containing a reference to a regular definition will be replaced by it’s alternative, also E will be (^).

**Part three:   
Transition Table for minimal DFA:**

80 is the Ø state in this example.

****

**Part three: Transition Table for minimal DFA:**

**Part Four: Test files outputs:**

**1-Test Case Output 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case 1** | **Test Case 2** | **Test Case 3** | **Test from pdf** |
| program  id  ;  var  id  ,  id  :  integer  ;  begin  id  assign  num  ;  while  id  relop  num  do  begin  id  assign  id  addop  num  ;  read  (  id  )  ;  if  id  relop  num  then  id  assign  id  addop  num  else  id  assign  id  addop  id  end  ;  write  (  id  ,  id  )  end  . | program  id  ;  var  id  ,  id  :  integer  ;  begin  id  assign  num  ;  id  assign  floatNum  ;  id  assign  num  ;  while  id  relop  num  do  begin  id  assign  id  addop  num  ;  read  (  id  )  ;  if  id  relop  num  then  id  assign  id  addop  floatNum  else  id  assign  id  addop  id  end  ;  write  (  id  ,  id  )  end  . | program  id  ;  var  id  ,  id  :  integer  ;  begin  id  incop  ;  id  decop  ;  while  id  relop  num  do  begin  id  assign  id  addop  num  ;  read  (  id  )  ;  if  id  relop  num  then  id  assign  id  addop  floatNum  else  id  assign  id  addop  id  end  ;  write  (  id  ,  id  )  end  . | int  id  ,  id  ,  id  ,  id  ;  while  (  id  relop  num  )  {  id  assign  id  addop  num  ;  } |

**Part Five: Assumptions:**

* Assumed that the epsilon has a symbol (~)
* Assumed that whenever a ( E) was found in the regular expression then it will be replaced with the symbol (^) as the ( E) means exponent .
* Assumed that the regular definitions will be replaced with the capital letter of its first letter **ex**: letter = A-Z|a-z Would become : L = A-Z|a-z

So that it will be replaced when it is found in any regular expression **ex:**  id:letter\* would become id:L\*

* Assumed that the arrows would carry a value that is a character **always** , so when I read the regular expression if there are two character they would be separated as two different nodes
* The regular definitions will be replaced with an exception in every node

So that wouldn’t be any confusion if a node has several arrows

Making the regular expression L-{any other character that has an arrow in this node}.

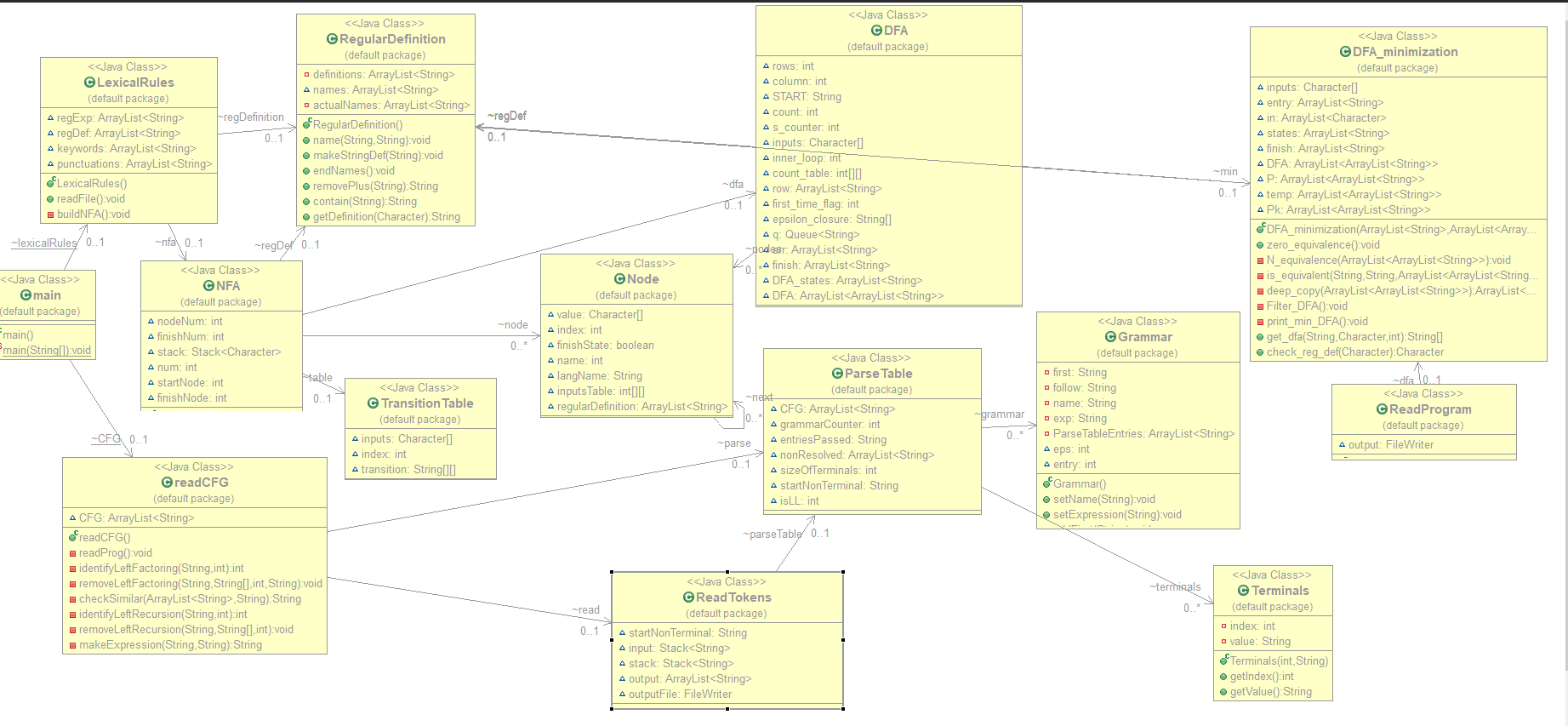
* The code is sensitive to spaces for example in lexical rules.txt the punctuations should be separated by spaces

[\( \(]] 🡪 There should be a space between them.

Phase Two

Parser Generator

**Class UML Diagram Figure:**



The class diagram consists of both classes used in phase one and two.

**Data Structures:**

**Stack:** It was used in phase two when applying the parse table and the tokens (from phase one as input), to determine if it is accepted to the CFG or not. (In **ReadTokens** class).

**ArrayList :** It was used several times  
**-**In class **ReadCFG**, an arraylist is used to store each CFG read from the input file.  
**-** In class **ReadTokens,** an arraylist was used to store the output of terminals that were accepted by the CFG.

**Algorithms and techniques:  
-First:**1-Read the CFG from bottom to up.  
2-Split it each time we see ( | )  
3- for loop on each definition   
 -If this definition begins with a terminal ( ‘ ) then it’s first is this terminal.  
 -Else:  
 - If this definition is (~) i.e.: epsilon then put epsilon in the first  
 -If this definition is nonterminal, then get the first of this nonterminal   
 There are two possibilities:  
 1- If this non terminal’s first doesn’t contain epsilon, then continue.  
 2-If this non terminal’s first contains epsilon, then add epsilon to it’s first.

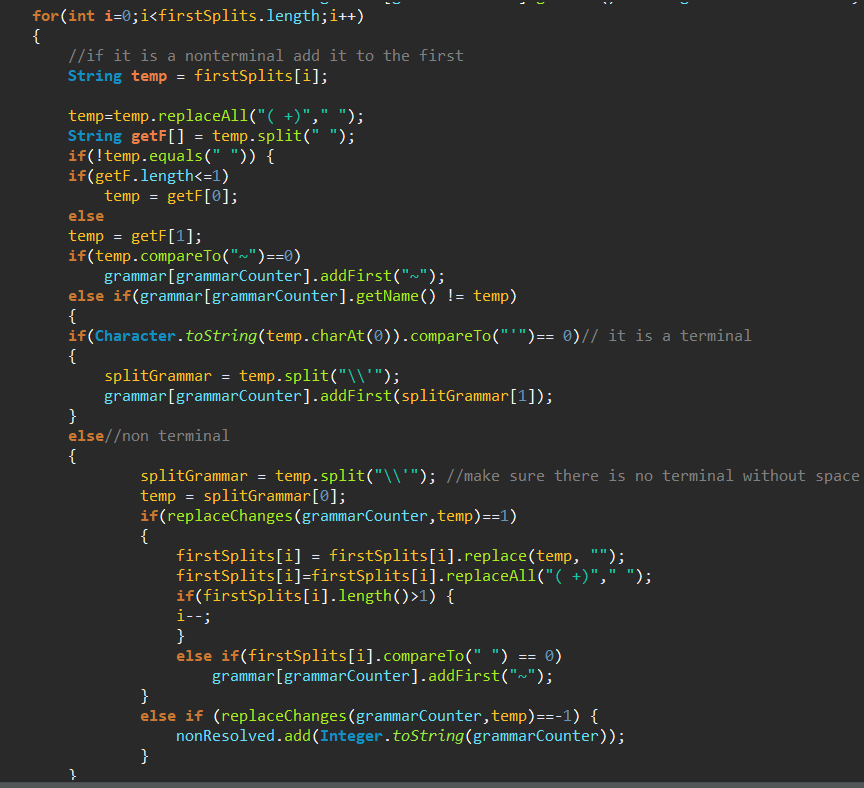
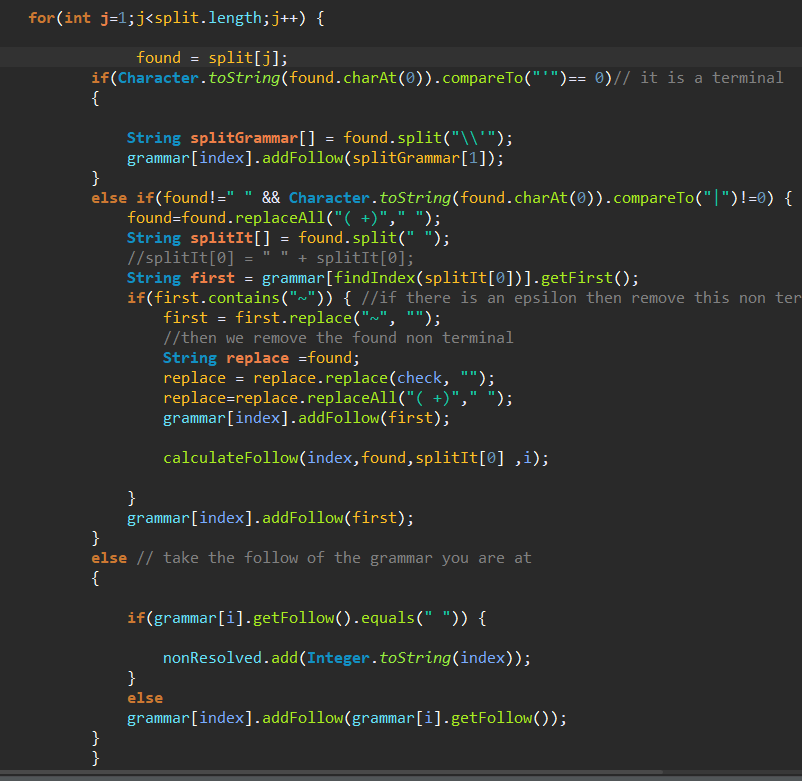


Figure 4 CalculateFirst, for loop.

**-Follow:**1-Read the CFG from top to bottom2- Split it each ( | ) , and check the occurrence of the CFG name in all the CFGs.3- When there is a match , Split on the occurrence of its name then loop :

* If there comes a terminal after its name, then add it to follow.
* If there comes a non-terminal after it, then add the non-terminal’s first
* If the first contains epsilon, then you need to remove epsilon and replace the non-terminal’s place and calculate the follow once more.
* If it doesn’t contain epsilon, then simply add the non-terminal’s follow
* If there is nothing after its name, then it’s follow is the follow of the CFG it’s at



**Figure 5 CalculateFollow, for loop.**

**Functions Explanation:**

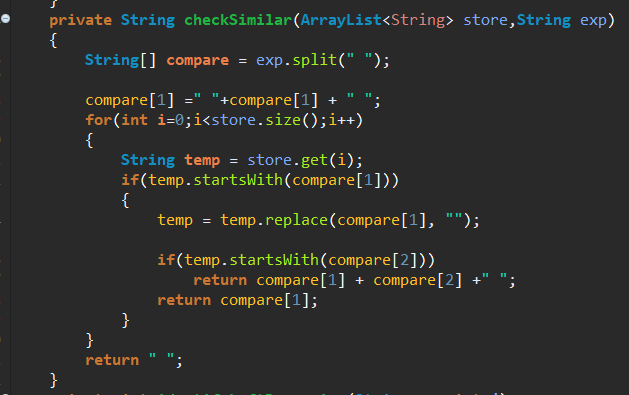
**-Left Factoring:  
1-Identify it:**



This function is used to identify if the grammar has Left factoring or not, so it begins by splitting the CFG with the name and the definition, then checks if there are any similar terminals/non-terminals between the OR

Ex: # A ::= ‘a’ B | ‘a’ C ,, there is left factoring , similar = ‘a’  
The array list called **store** stores the definitions that were checked before so we can check for I in the function **checkSimilar**

**2- check for similarities:**



This function checks for similarities between the previous and the definition that we have now, so we check for max of the first two terms if they are similar or not.

First, we check **compare [1]** if there is a match! then check **compare [2]**  
Return the common term.   
Else return blank String – no similarity —  
If there are similarities, then go to function **removeLeftFactoring**

**3-Remove Left Factoring:**



This function is responsible for removing the left factoring and making two new CFG expressions rather than one.

The algorithm is rather simple, it splits the CFG when it sees ( | ) then checks if the similar String matches it , if yes then add in **newExpression** the expression without the common similar Else add in the expression normally to **temp.** At the end you will have two CFG expressions.  
Temp will take the name of the original CFG New expression will take the name of the original CFG + add “DASH” to it.

**-Left Recursion:**

**1-Identify it:**

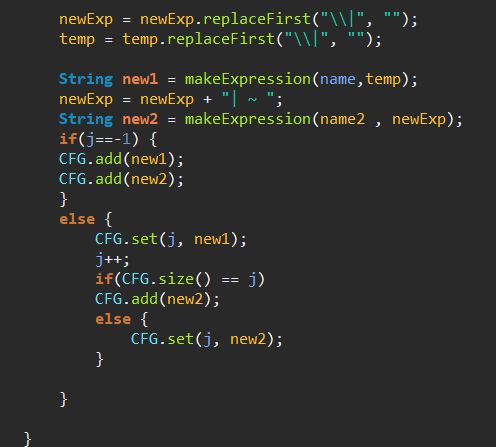
Identify the left recursion by checking if the name of CFG occurs as the start of the definition, split the definition each ( | ) and check the start String .



**2-Remove Left Recursion:**

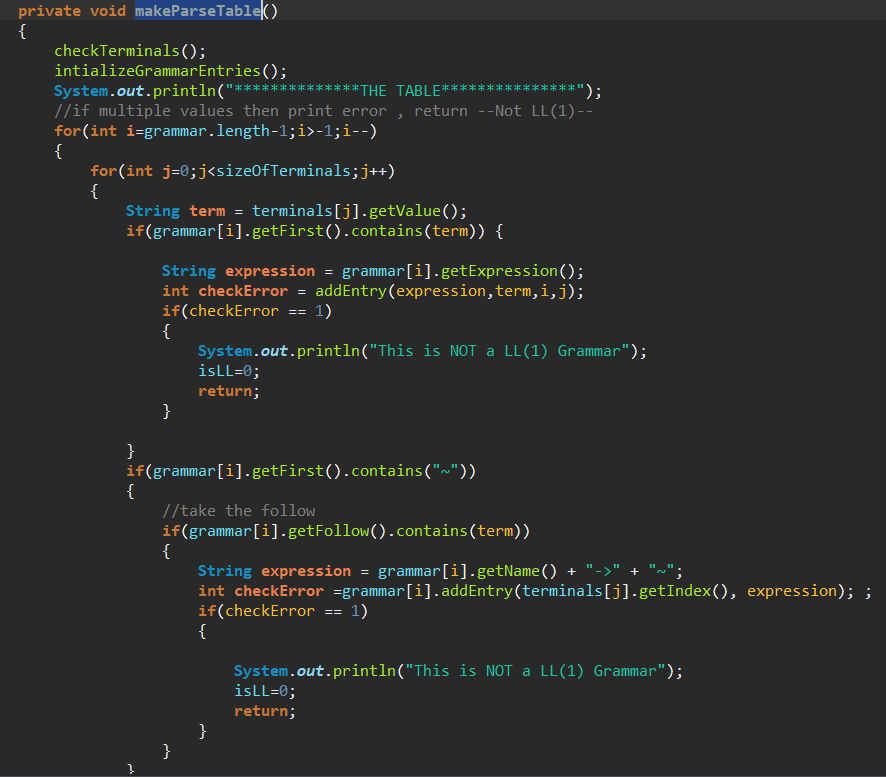
Removing the left recursion algorithm is to take the splitting string ( | ) then checking each String if it starts with the name of the CFG then add it to the new Expression (after removing the occurrence of its name)

Else then add it to temp and also add the new name to it (new name is original CFG name + DASH)



Then add the new Expression and temp to the CFG as we did in the left factoring.

**makeParseTable:**



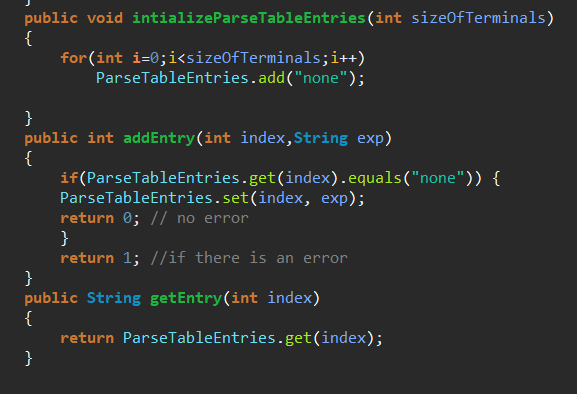
This function uses the first and follow that was calculated for each CFG to build the parse table, each grammar has a class called **Grammar**, each have an entry to the first, follow and the parse table entries.

There will be two for loops, the outer loop is for CFG the inner will be the terminals, so for building the parse table we will build it line by line.

In inner loop:

* We’ll get the first of this CFG then check if there is already an entry in this position –If there is an entry so it is NOT a LL(1) grammar –else It will add an entry to the table.
* If the first has epsilon(~) then we see the follow , and add entries

NameOfCFG -> ~ where (~) is epsilon –Check if there was already an entry in the table if yes then it is NOT a LL(1) grammar.



**-Grammar Class:**

As stated above each CFG has an entry in Grammar class, so there are three functions responsible for the **parse table**

**1-intializeParseTableEntries:** This is used to fill up the ArrayList that will hold the entries to the parse table, so it initializes them with ‘none’ to indicate that they are empty.

**2-addEntry :** This is used to fill up the entry to the parse table to this CFG so it first checks if it is empty then set it with the expression given else there is an error (Not a LL(1) grammar)

**3-getEntry:** This function is used to get the entries to the parse table so simply give the index to a specific terminal and it returns its expression to this terminal.

**- Stack tracking:**

We have two stacks the input line stack and the normal stack, this function takes the peek of both stacks as arguments, then checks if the stack peek is a nonterminal if yes it compares it with the input stack and pops both if equal, else panic mode error is printed.

If the peek of the stack is an expression, we call a function to bring its output from the parse table according to our input (peek of the input stack).

If the output brought from the table equals “none” i.e. table cell is empty for this output, panic mode error is activated, and a suitable error message is printed.

**Figure 6 Stack method**

If the output equals epsilon we just pop the stack and return.

After that, if we reach this point it means that the output brought from the parse table is valid, so pop the stack and insert the replacement expressions brought from the table.

Lastly, we print the new stack and write it to the output file.

**Assumptions:**

1-The CFG in CFG.txt are all separated by spaces, each line should end with a space.

Ex: # METHOD\_BODY ::= STATEMENT\_LIST .

2- If there is a left recursion then it would be **direct,** Left factoring is applied to at most two commons.

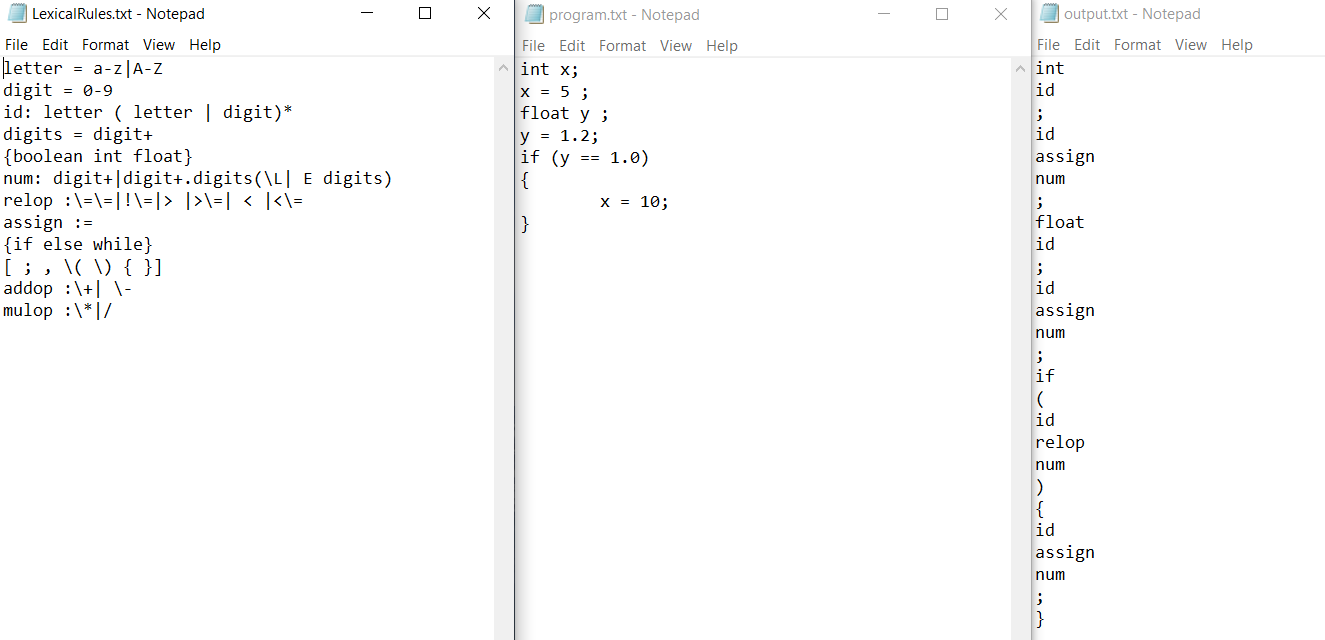
3- If there is an error in the tokens from the last phase, Then the parser simply ignores this token. –Removes it --

4- The terminals are taken from the CFG so when a token is inserted that is not part of the CFG the parser ignores this token. --Removes it—

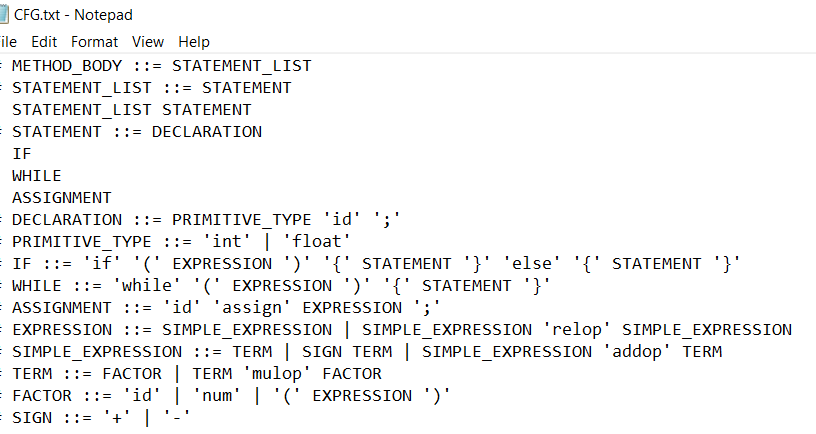
5- The terminals must be in the form ‘id’.

6- Each CFG must begin with #.

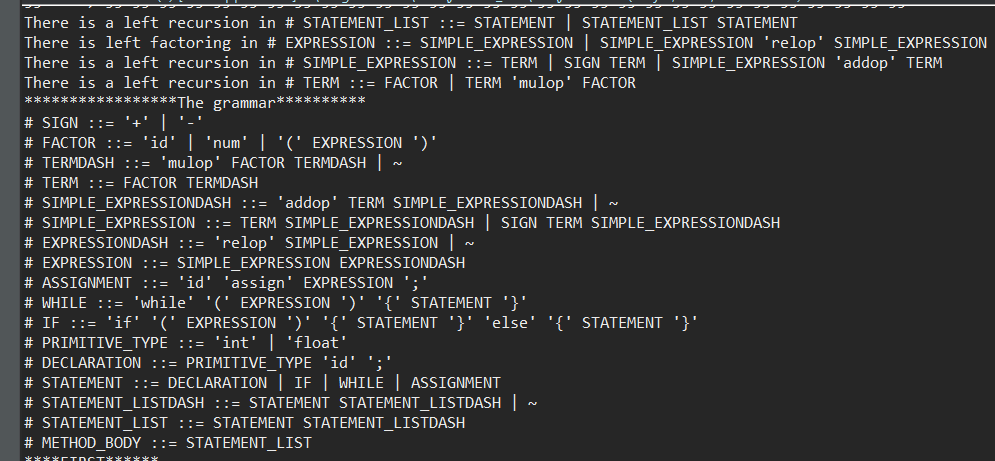
**Sample Runs:**



**Figure 7 The three text files from phase one.**



**Figure 8 The CFG text file.**



**Figure 9 The grammar in runtime, there was Left recursion & Left factoring.**

Note that the new grammar is printed from bottom to top

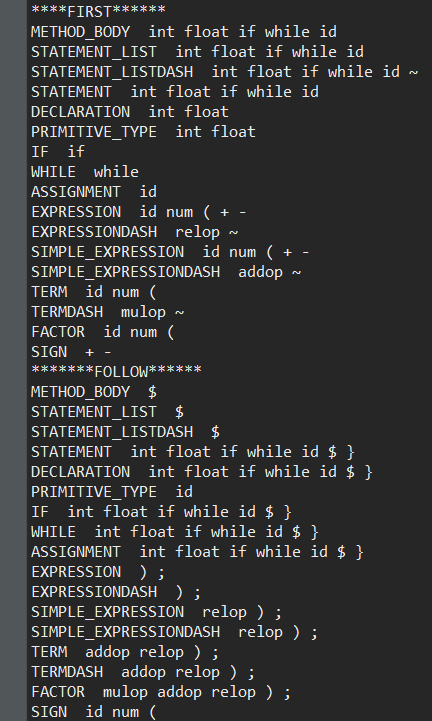
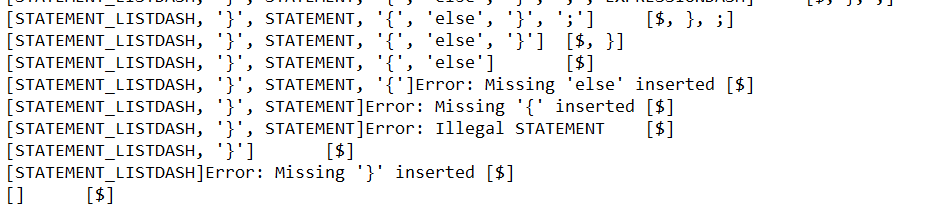
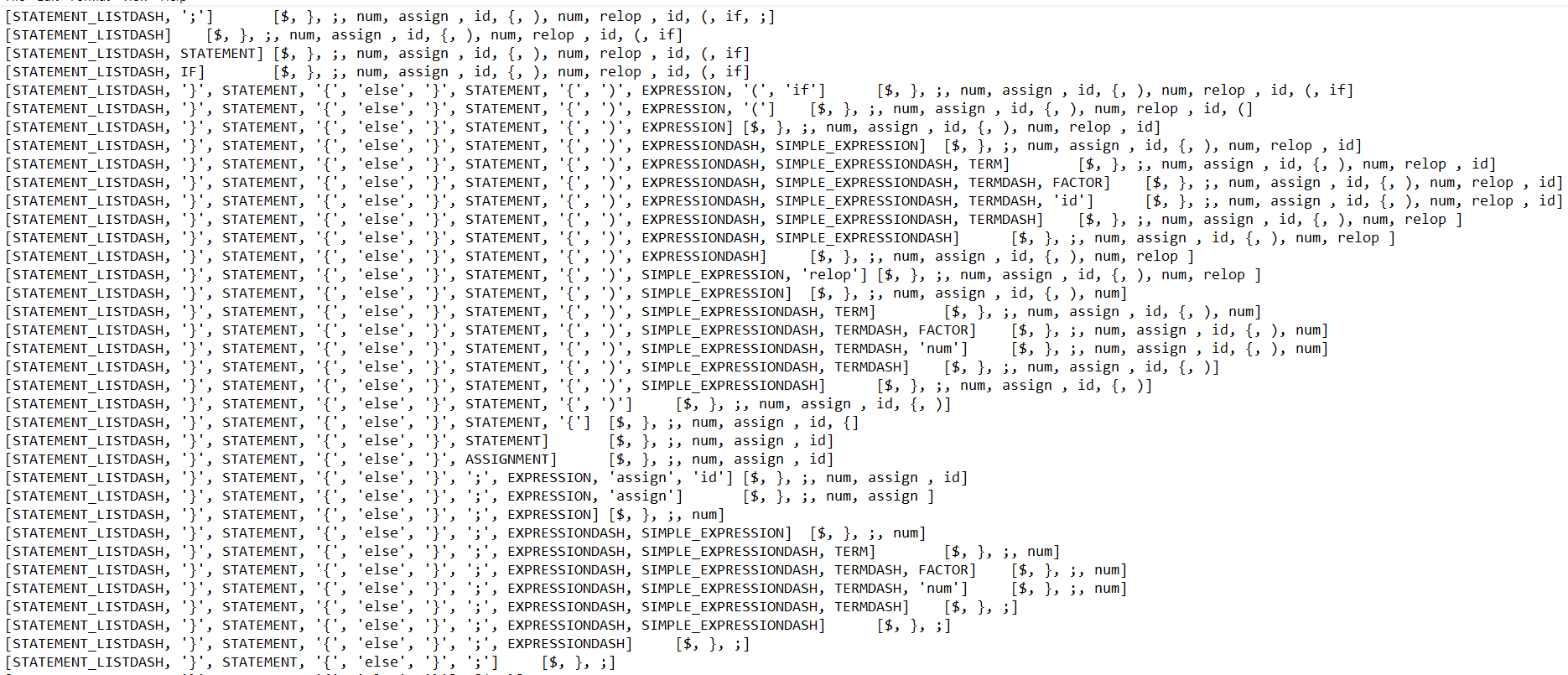
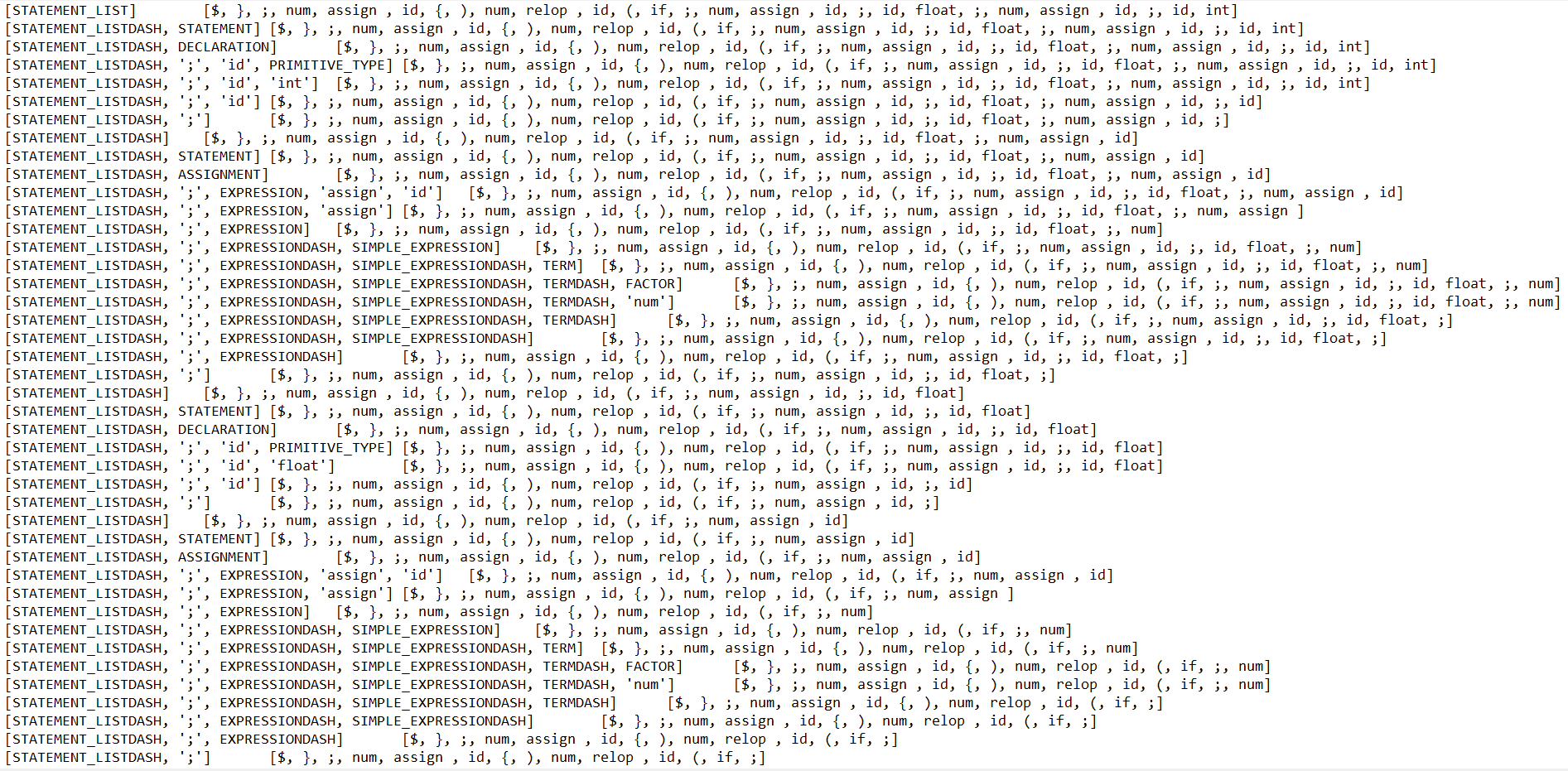


Figure 10 First & follow. (Note that ‘~’ means epsilon)

The **parsing table** was too big to fit the screen, so we divided it as follow:

|  |  |
| --- | --- |
|  |  |

Each Nonterminal with its entry in the parse table is printed alone. The ‘-’ sign means that it goes to nothing when this terminal is the input and ‘~’ means epsilon.



Here you can clearly see the method used in errors: Panic mode, when else was not found in if statement.



Phase three

Java Byte Code Generation

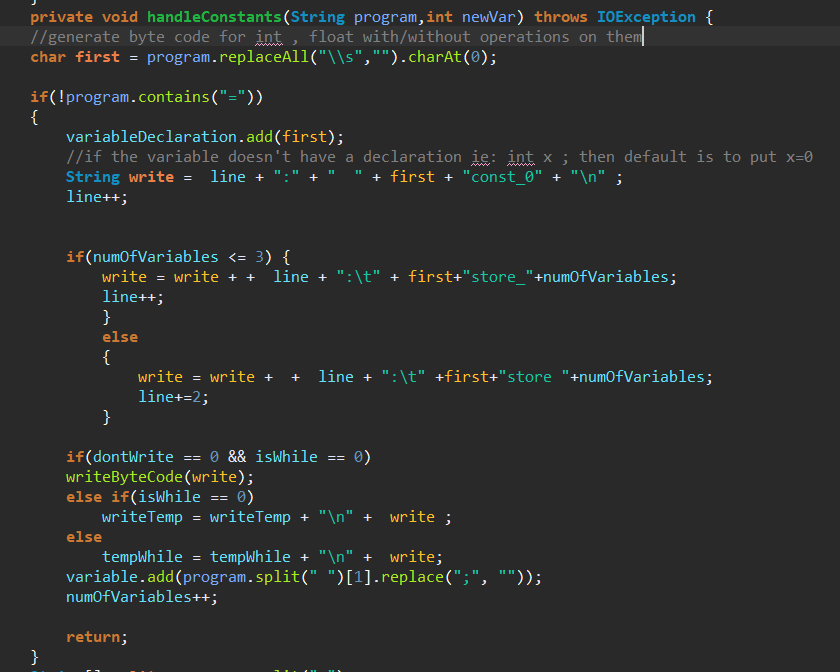
**Description:**

We implemented this phase using our own parser generator implemented in phase two, instead of bison –Bonus Part –

This phase won’t run unless phase two has no errors i.e.: No semantic errors in the program.

**Functions explained:**

1) **handleConstants** – This function handles the cases of declaration of a new variable, applying operation on it



The above handles the case of int x; or float x;

We set the default of any new variable as (0) –Initialize the variable- so that there wont be any problems faced if we don’t initialize the variable

First we check if the line contains (=) – no initialization – then we add it’s type whether it is an int or float to an arrayList called **variableDeclaration** and also add the new variable to another arrayList holding the names of each variable called **variable**

The variable **numOfVariables** is just a counter to count the number of variables found in the program, this helps in writing the bytecode as when storing, loading the variables they should be placed in certain places.

The variables **line** is also a counter, but it counts the bytes that is used by bytecode.

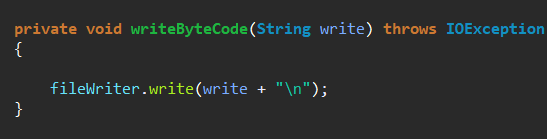
In bytecode there are default store mnemonics either in int(i) or float(f)

Store\_0 Store\_1 Store\_2 Store\_3 -🡪 Take only 1 byte

Store 4~more 🡪 Take 2 bytes, one byte for opcode one byte for the number, as it is not built in

That’s why the code checks if numOfVariables is <=3 to see which mnemonic to use.

dontWrite & isWhile are both variables used when (if) or (while) is present, they will be explained later.



If there is no (if) nor (while) then we write directly to the output file .

**2) Primitive types with declaration:**



The rest of –handleConstant—function, checks if the declaration of a certain constant is an operation or a number

It first splits on (=) then String check is the number/Operation after the (=)

The int called newVar is used as a flag to check if this variable was already declared or not , if not then we have to get it’s primitive type (int or float) and it’s index.—To load and store it—

The **try catch** is used to check if the declaration is a number or an operation

b-1) **handleNum**

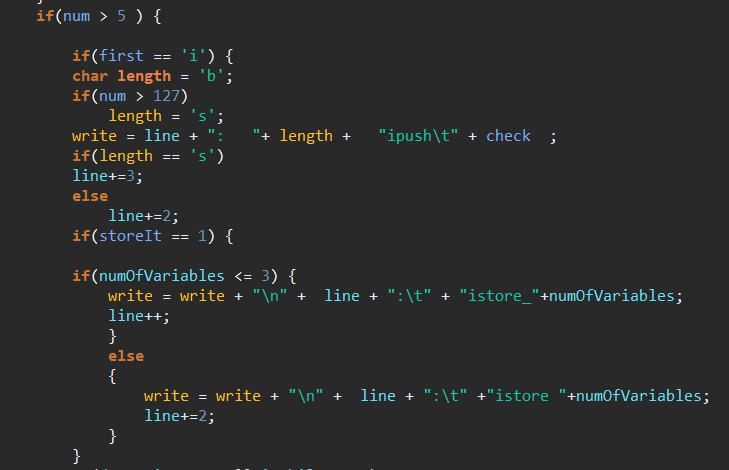
There are certain cases for a number to be loaded to the stack in bytecode, here it shows if it is a negative number.



If num == -1 then the bytecode mnemonic is iconst\_m1

Then we check if we want to store it or not yet , if yes we do the same as we did before and that is checking the numOfVariables and choosing the right mnemonic to use and how many bytes .

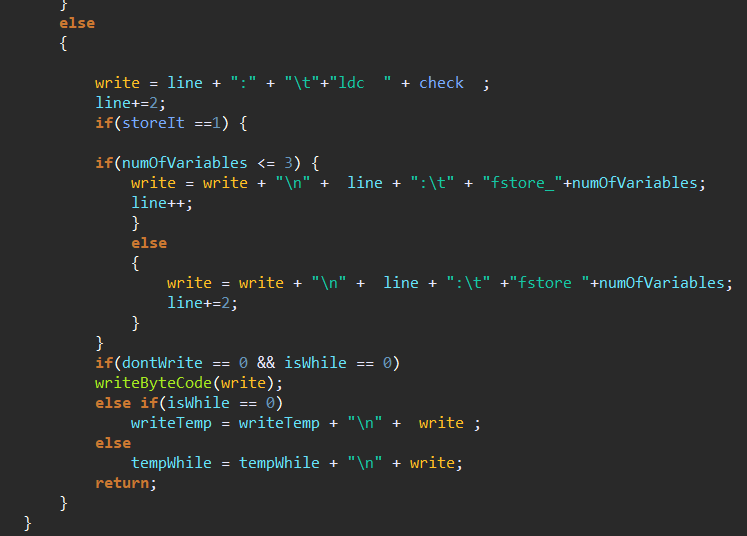
And check the (dontWrite and isWhile) that will be explained later.



If a number is greater than 5 then we need to use different mnemonics for int and float, the above shows the case of int

If the num is short, meaning the num > 127 then we will use sipush num, this takes 3 bytes, 1 for opcode 2 for the num

If it is less then, it is a byte 🡪 bipush num, this takes 2 bytes, 1 for opcode 1 for num.



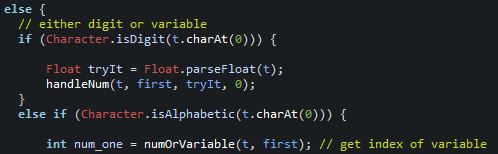
This is the same as the previous but if the declaration is float we use 🡪 Idc num with 2 bytes

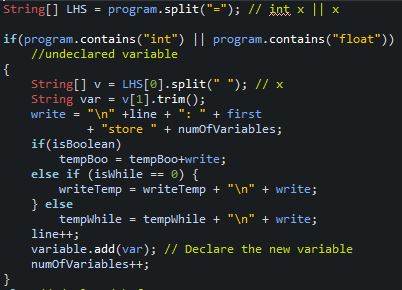
**b-2) handle\_A\_op:**

![A close up of text on a black background

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDgRXhpZgAATU0AKgAAAAgABAE7AAIAAAAHAAAISodpAAQAAAABAAAIUpydAAEAAAAOAAAQyuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEphcnZpcwAAAAWQAwACAAAAFAAAEKCQBAACAAAAFAAAELSSkQACAAAAAzgxAACSkgACAAAAAzgxAADqHAAHAAAIDAAACJQAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA2OjA0IDE5OjE1OjU1ADIwMjA6MDY6MDQgMTk6MTU6NTUAAABKAGEAcgB2AGkAcwAAAP/hCxlodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIwLTA2LTA0VDE5OjE1OjU1LjgwOTwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KYXJ2aXM8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBIAGnAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A8UhN3czpDbmaWWRgqRplmYnoAB1NWpdM1u3miinsr+KSZS0SPE4MgAySARyAOeKs+Df+R30b/r8i/wDQhXTP4t07SNchiUXl0lrqF1czzSxqGLyKU2qu4gqOpJPPpWyiuVNv+tP8znlOSlZL+tf8jmdP0PVbvWLexuodRthMokZhaySMsROPMCAZYfSqdzb3sHnSr9qe1inMH2goyqWHY56NjnaeavaDrSW/iCxvtbu72WGxkEsaIvmnO7cVAZ1CgnJJHftWjYeIdHtdU1KO7W8u9KvZUuQhhVZFlWTePl3kYwWUnOcHpRaLS+f6f8EHKSb0vsY6aL4gkEpTTdSYQnEuIJDs4zzxxwQeexqwvhrX5PD41iO2unti5UBY5C23bu8zpjZ/tZ61uaB400uyuhqOqWsjak189zNLHaxymVGHCq7nMeCSflHPAyKxU1bTrjwvc6ZdtdQy/bmvIXihWRWym3a2WXb25GfpQ1G3nb/L/g/cClO+39a/18zOay1ZNPW/e2vVs2OFuTG4jPOPvdOtRWy317cLb2a3FxM/3Y4gzM3fgDk11GqeMIr7RRDaTS2cjWUdpLbLp8DLIEwP9fkOBwDjHB/OuVsL2bTtQt721bbNbyLIh9wc0moqdr6FRcnG7WpLBa6ncoj20F3Mry+SrRozBpMZ2DHVsdutX7DQ9Vuddi0y8h1G1dsNL/oskkkSf3/LA3EVut4z0qLWIxY213DphjufMACiWOWfIZ05x8o2gcjgHpmq1v4j0iHVtBLPfGz0VMrIYEMs7eZvIK78KvJA+Y4/Gqio3V3/AF1/rqRKU7OyMW10zUtQ1aSy05Ly68uQqzRQuSq7sbivVfxpuu2U2ia9eab9ref7LKY/M5XdjvjJx+dbkXiDRUh1K1dr8wXV9HepKluiuxUsTGw34A54bJ9cVh+JdTh1nxNf6jbK6RXMxkRZAAwB9cE1Dsorv/w3/BKi5OTvsWJ9D1RdHtdStUvLq3ltzPNJHExS3xI6YZhkfwZycdfaqsuma1BpyahPZX8dlJjZcvE4jbPTDEYOa1rLxRBbQafFJ9pMdrpd3ZsgxjzJjLhgM9PnTJ6/L0OBVyTxRokfhS506xtpYprizhhKCyhXbIrozsZwfMcMVJwcAcDHTGnLBvf+tf6+ZSve39dP6+Rzt5pmt6fFHLf2OoWscjlEeaF0DMOoBI5PtWjd+HrzSNP0678QSahp4vJ5Y2ie1PmIqBCHCsy7sl8dunU1qp45tV1m9vpIrqcTa3DqEayYyIkEg2k5OGAZcdRx14rO1HUtCutO0/TYLjU/Jgup557qW2QyN5gTGEEmM5TBy3v3wElH+vl/wQV76/1v/wAAqalomoWvii50TTWutSmhkKIIYmLyADOdgJPT61mXIvbO5e3uxcQTxna8UoZWU+hB5FdhJ4r0VPFGq31sbprfVYSjtcafDI1u25WGI3dkkHyDOSvXI6Vk39jrXiq/kvtLsdR1a3QLCs8OmCIAKoAXZFlFwMcA9MVPLorDT7lTStJ1DWLa8mtrlUFpHvKySMDIdrNtXAOW2ox5x901mfaJv+er/wDfRrrLLXR4St7HT7vQP9NguTdXX2+OWJ1JwFChXXI2Z++CMseMdcybwnrV1PJcaRoGsS2ErF7aQ2L/ADRnlTwCOmOhIocf5f6/r9AT7/1/X6lF9P1iPTU1F7S+WxkOEujG4iY5xgNjB6GnXum61psKTajZX9pE7FEeeJ0VmHUAkcnit698SafKt5cRi+F/e2UdlJaOirBDs2AsG3EkfuxhdowT145s+NdXs4b/AF+wtp7y7ubzUhJO1xGESHyi4Cph2Lfexk7cAdOeKcYrZ/1/w2ok31MG80i7tL62sTdsbySESzxkkC3yNwBOeSFwSAOM45NV7exu7y8FvY3P2o7dxeLzNq/XKg/p3rS8UFH8WSavHcTJaakxu4LiEbmXdyV6j5lbKnntn0qm2q2w1O1uAryeWpWaYxqjy5zyVBxkA9c5PeuZuXQ7KUaTV59192n/AA+xUFrqZnMIgu/NABMextwz7U+G1u3junma6iFupz+7cjd/dJ/h/GmC4gt7W7gt5JnWYIFZkCdDk5AY1Jp93bILlr6a4Mk0RiykYfg45JLD06U25WYRhS5kn+enUgWHUHtzOkdy0KjJkCsVA9c/gacLfUmtvtCw3RgwT5oVtuPXPSrMOqRQ/Zl/eskEE0eMDkvuwcZ9xn6Vp3kB/sYsFMf+hx7pzCdkijaQgfdjOcdFzxjPU1MptM0p4eE02nsv0X/BXyOdje5mlWKFpZJHIVUUkliegA71YlstWhmhhmtr2OWf/Uo8bhpP90d/wqXw3/yNWl/9fcX/AKGK1ItfsbNFtEkvLiFzOZrmSNVlUyqFJRdx6Yyctzk9OtdkIRcOaT/rT/Pc82UneyX9amObHVxfCyNre/ayMi38t/MxjOdvXpVqy0HXb5rtYLa732i5kQxvuzkfJgD73OcegNWI9Zs4ZrWGG4uVtre2aEyy2kcrTBn3FTGz4C8/3ieM9+IodS0uLVL8Qwz2+n3duYBsXe6fdO4KzdyvQscA9Tiny0+/fr939foLmkZUzXVvM8U5mikQ7WRyQyn0IPSmfaJv+er/APfRrW07TdJnsNXur29eNLeE/YvnjWSaXcNqtFktgjOSOBjr2OLXP1sa9CT7RN/z1f8A76NH2ib/AJ6v/wB9Go6KBkn2ib/nq/8A30aPtE3/AD1f/vo1HRQBJ9om/wCer/8AfRo+0Tf89X/76NR0UASfaJv+er/99Gj7RN/z1f8A76NR0UASfaJv+er/APfRo+0Tf89X/wC+jUdFAEn2ib/nq/8A30aPtE3/AD1f/vo1HRQBJ9om/wCer/8AfRo+0Tf89X/76NR0UASfaJv+er/99Gj7RN/z1f8A76NR0UASfaJv+er/APfRo+0Tf89X/wC+jUdFAEn2ib/nq/8A30aKjooAKKKKACiiigAooooAKdFFJNMkUKNJI7BURRksT0AHc02rOnX8ul6nbX1ttMttKsqBhkEg55qo2ur7Cd7aG/o3g2a48Rx6ZqxVGdJsx2t1FJIrohO0qpYryMYIHesybw3qVveR21wttE8sXnRvJeQrG6ZxkSF9p57A5rQg8T6fY+I21ew0q4jeQTeZFLeh1/eKR8v7sEY3HrnNWNP8cCytbWE2EgNvYNZieC58uVcyb96NsOw9uh+tV7jSv/W//AMb1U9EZQ8Kaybq4tzZhXtinnFpkCqHGVO4tgggZyDj3rOvrK402+ms72Iw3EDlJEJzgj6cH610OseNX1ZNWBszEdSjt0Y+eW2eV65HzZ/T3rl6mVuhpHnfxG/ZaDD/AMI7Nql7tl+cLFHFfwxEDaSSQ24k8D5MBjVK501bfQLW9KuZJpWUss0bx7QAQMKSytzyGx2qEX+NDOneX1uRP5m7/ZK4x+PWrUmp2DeHk05bK5EqSGYTG6UrvIAPy+X0+Xpn8a1k6bTt2VvXS/T1JXMmr9xlz4d1O0XM0C58xYyiTI7qzfdyqkkZ7Ejmn23h65m1m206Wa1jeZwpZbuJwnOD0fGf9nOT2qteaiL3Wnv2jeMPIHKRyYYfRscH3xV698QLPfWN1b2zia0k8wzXMqyyzHII3uFXcBjuCeTz0xUVR5rva/4fcJ+0sZ2o6fJpt20EskMhBODDMkgxnHO0nB9jzVWt2wl0K88U289/E1rpvmeZdR3EzyeYM5ZVMaAgkcD36sKx7toHvJms0aO3aRjEjnJVc8AnucVzPQ1WqLVtp8cmnPeTyyrGj7CIYfMK8dWyw2g549eaE0mV9KF6ssIBcrsaZAcYznluvtjNJpt9Dp8yz+VO06NlWjnCKR6EbSSPXnmkS+iazlt7mBmDSmVDFIE2tjHQg5HTjis3z3djrj7DlXNvr3+X9IadLuxa/aDGoTZ5gHmLuK+oXOcfhUk+nFI7JYkZprkEf6xGVjuwNpU8ds571Xurn7T5PybfKiWPrnOO9Xf7UtUSy8q0mDWb71LTghvm3EEbB/n1pvmFFUdVfovv0v09SB9IvY5I42iBaViq7ZFIBHUEg/KR3zjFRXVjPZeWZxHiUbkKSq4IzjPyk960dIv0NxBDLtiCSSyh2cAEsmAvPA6dTkc8iotbaN5Ldkcb9hDRLJG6xjJxgxgLzycAfzpc0uZJlypUfZOcW/6t5ef9WZBYaPe6lFLLaRxmOFlWR5JkjVS2cZLEDnBqeDw5qk7SKtuiGOY27edPHH+8/ufMwyfYdam0u5sIdAvU1GN5911AywxXAiZsLJk8q2Rzg4Hcc1BqWtyanDKs0Sq8t29yWU8DcANoHtjrmuxxpRjfr/w3l6nnXm5WWwxNB1GS1NwtuAoVmCNIqyMq/eZUJ3MBg8gEcH0NOPh/UV09r1o4lhSMSsDcRh1Q9CU3bucjHHORVmLX4kgt3eyZ762t2t4pvOwm05GWTbkkBj0YDpkeu1q09pL4feMXcSotnAEliuIC0zqq/u2jC+bgc/ebAK59BVKnTcW09v8Ag+X9d9Rc01JJr+v6/wCGOcuvD+o2Ue65iiQB1Rh9ojJQt93cA2VBx1OBTh4b1NpUSOKGXerOHiuYnTC43ZcMVGMgnJ4BzTZNXEniQaq1srKJ1lMDtkHBHBOPb0rVu/GRuoREbe5kAinjD3V4Zn/ehe+0cDbwAB1/EkY0He7f9fIL1LrQpw+HzZa1a2fiPfZxXJMfmxuj+W33QzAE8BsEjg46dqy72zm0/ULizul2T28jRSL6Mpwf5VuSajb+JtctxfGPTrVZpZ55XlztRm3sBwCWwMADknFZeuamdZ1++1Ip5f2qd5Qn90E5A/AVzz5VJcv9bf8ABNI3a94vaX4Vn1XQb3Uo7q1j+zFAsclzEm/cxB3FnGzGOMjntVq68HTt4d07UdMRpmmtpZ7lWmTgI5B2LwWAAycbsZHqKz9H1m3sNN1DT76zkuba+Ee7ypxE6FGyCCVYd+mK0bPxkLOPTkWwLCxs7i1GZvv+bn5vu8Y3dO/tVe5y/wBeZk/ac2nf8DNbwtrC6e16bPMCwrPkSoWMbYwwXO4j5hnA4zzipm8Ga8rBfsSls7WVbiMmM7C+HAbKHaCcNg8Y61DqWvSX9zpk6ReU2nWsUCAvuDGMk7ugxknpW2njyG21CW7sNJaF7y8W6vQ11vEpGflT5RsBLMedx5otDXX+r/5A3Vtt/X3nPafoWpaqqNp9t5wkm8hcOo+faWxyeBtBJPQY61WvLKWwn8mdoGbG7MFwky/99ISPwzXTXnjn7Ylmn2S4tBbTPIXs7vypCNpWNVbYdu1cLnByB2rK8Ta8viLU1vFs0tmEYR2ypeZuSXcqqgsc9Qo7UpKP2SoubfvIpadaQXk7RTzyQnaWUpEHzgEnOWGOBU0OnWzokk128STymOA+TktjGWYbvlHI6Z71Dp13BZztLPBJMdpVQkoTGQQc5U54NTRajbJGkcto8iQSmSD99grnHDfL8w4HTHesXzX0O+n7LkXNa+vfy3t89vIlOhtHYtPL9qZlaRWENtvRCpx8zbhj8qpNp10sZkMY8vyhLv3rt2k465xnPGOuanm1GC7tgt3byvMGdhIkwUZY55Uqe/vQ2po2mfYDbnyFAZP3nIl7vnHIOcY9Md+aS5+pUlh29NNPPfz0IZNOuYlTeihnICxiRTJk9PkzuH5U/wDsi9M0caRrI0hIXy5UcEgZIyCQDjtUs2qRvfR38duyXayLIxMuYyR/s4yM4/vVai1aO61KNp5LsRKku5bi73jlCMKSox6d+1Dc7bBGnh3K3N1X9bf15lW20O4nvY7eRooxIhdZPNRlYDPQ7sHkdjxTbPTDLfGCfa4VCxEFxGSeDjBJwfcDnFOXVViurRoLcrBaggRvJuZt2d2WwPX04ptne2dnf/aEtZ2VRhENwMjIIOTs56+go9+zBLDpx166+mnl3uQW2nXV4m+BFK7toLSKu5vRckbj7CnppN69uJ1hGwqzDLqGYLndhScnGOcCpotSto440e0kdIJTJBmYAqTjIb5fmGQOmKRdXImikeHLJFKhw2Ml93PTjG79KG59ETGOH05n/V/T19fLYzq2NV06y0/RtKaPznvbyD7TI5lXy1Uu6hAm3OflBzu79O9Y9dD4llXUtP0nVBcxTzvaiG8dplM7TK78upO8/Js+YjHQZ7Vo9vmcq3OeooooAKKKKACiiigAooooA0rCwhubN5PLlupw+Ps8Mqo4XH3sEEt+A4xUMemTSCEh4wk0bvvJOEC53A8deP1FNs75bMq62kEkqNuSWQvlT24DAfmKstfCPR5IfOWae6k3NhSPKHBIyQOSQvTj5fes3zJ6HXH2Tiubp/X47de5BLpzQWUNxNNGgnG5EKvkjOM527f1zVi80iOKS2jtLuOeWdEIjAbLFu4yoGPqc1XXUWTT5LSKCKNZQBI4Lkvg5BILFc+4FL/acm23IiiE9vtEc43bgAcgYzt/Sn71xXopW8l336/1t0LUvhu8idRI8aoQ5LuroBtGTwyg9PQEVV1HS5dMZVmkik3Fl/dknBGMjkD1FB1LEryQWdvAzo6Ns38hhg8Fjj8KnTXpRqdvez2lpc+RMZfInjLRSE44Zc8jjpSjz3V9h1Hh+SXKteg3TdFe/tZbua8trC0idYzPcl9pdskKAisxOAT0wMcnpVr/AIRLUBqFtZu8CS3F81imXJAcBDuJAPykSLgjPfioLPXmtY7mCaws7u1uJRMbaZXCI4zgrsZSOCRjOMde1X7Pxvf2t19qms7G8nW7N3FJPE37mQgA7QrAYwq8EHGBjBpP2l9P6/rUwXJbX+t/+B+I0eHLH/hEl1R9Ztork3LxGJ1lI4QHZxGfnyeuduCOetc6BkgetadvrbQ6XPYXFla3cEspmXzvMBicrtLKUZe2ODkcDioW1EPpNvYfY7RPJmaU3KxYmfOPlZs8qMcDFaU0+b3vIU3HTlOgv/h3f2VzJbx6ppd5PBfR2N1HbSyH7NJISELEoAQSD90sR0IB4qne+F4NNvYIrjxDo8wNw0Fx5Ukx+zsvXeBHuIPQMgcZHWtbxN48WbxJfSeH7Kxgs31X7cZokm3XpRyY2k3uSByTtUIMnpwMcqmoqdZbULuyt7wPI0j28pdY2LZOPkZWxk9mHSiLd0/66f8AB/Ajp/Xn/wAA6PVPCIufGuv2No+n6Na6WpnkEtzLJFFGGRcK5Te5y4/hyegGcAz6f8P7Y3mtWus69ZW0lhp63kDp5zJIrCNlk4iJ2bZBkYD5I461max41uNXvdTuv7L0+zl1S38i6Nv5x3/vEk3DfI2DmNRxxjPGeaZH4zvV1mS/ntLO4E1gmnzW0iuIpYljVADtcMD8inIYcj04oS923W34/wBWH1u+/wDl/wAH8CzoNhplxYeJLSe2tL97OxkubbUYnnUhldFG0EqCpDE/MmfpUdn4Gu7zRYNQj1LTUkuLOe8gsnkfzpI4S4kOAhUY8tiNzDPbJBAj0nxbFo/9oiDw7pMqagjRSLK9zhIiQfLXEwOMqDk5b3qKDxbe2z2pht7VVtbG4sI12sQI5jIWz82cjzmwfYZzzkfl2/HX/gArde/4af8ABIrmwtrLwzZTSL5l9qTNJGdxAhhRinQdSzBuvQL78Sz+Er2Od4Le5tLuaO4FvLHA7ZjY5xksAMfKeQTjHOKiuL+1vvDVjDK/lXumu0aDaSJoXYv1HQqxbr1De3NvU/FDDWLmTR4re3iN4bjzY1cmcgnaW3k8YJ4AA56V0QVO159/wMpc2nKVE8OTz3FrHZXdrdpcyNEssJfarKMkEFQ3TngHPbJqTTNAtrrXXsLnU4QqRuxZElUllVjjDR5GCOcgcZxzVabWRN5Mf9m2cdrE7SfZU8wI7EYJJ37uw4DAcfWny+I7qXVra/8AKhVraLyUi+dl2YI2ksxYjDEfe+mMCmnSTXr59v8AP5ifPYm0PTLG91/+yJ5o7n7Yvk211CXVY5j9w4YAkFvlII6MSOgqha6a1zFeu91a2zWcfmGO4k2NKdwG1Bj5m5zj0Bq/oep2Nlr39rzwx25s1862tIQ7CSYfcGWJwA2GOT0BA60zSdT0+z0/Vjf23228vIDDCskCssTEg+aHJyrDB4C856isJdbf12NV/X6mNRRRSAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA1NNhtp7YokUE16z4WK4dkDL22kEDOc9T6Yo+x2K6H50zzpcCcxtiEHBC/d++OPfGfaqltqE9ouIPKBB3B2gRmB9mIyPzpIr6eGGSJWVkkO5hJGr8+o3A4PPUVm4yu7M6o1KSilJd+n/B1ZPNY2sFqjSXbCeSESrH5Py89i2ev4YqaW0inj0qKF1Czkp5nkBWzvwS2GO7GeOnFZss0k2zzG3bFCLx0A7VabV7tkhXMIELBo9tvGpUg54IX1/Om1IUZ0tU10X6X6lldFjmlt1tbppFlleJiYcEFQCdozznPHT8K09D02Cy8UWiuv2gm1nmMN5ar8hWJyu5GLA8qDg+1Y2nal9nuE+1FmgUyNtVAcMy4zg4z24PFaWna1p1rrlrcTJKIUhmimlhto0dt6MoIjDBeNw780vfTt/XUuXsHSckrP/hvP1/qwvhO9a58bWYuLexlS+uEjmjksYWQqWGQqFcJ9VArnX4dvrW54fu9I0rxTDfXFzfNa2kqywmO0QvLgg4ZTIAn1BasNjlifU1ocfc6Wx8KWl5YWR/tV0v7+1muYbb7LlAIy4IaTdxnyzjCn3x1LbrwrBbW91ENSZtTs7Vbqe2+z4iCNtOFk3ZLAOuQVA64J7xzeKriPQbDTdPKwiK0e3uJDbx+Y26V2IWXBcKVYAgEDrxzzUm8S6rcab9hluVMRjWJmEKCR0X7qNIF3sowOCSOB6CtJcmtv63/4H/AJXNfUvap4bstLjs5nvru4tZmCy3dvaI8AJXJVHEuGYf3W2HHJAq9rGieGrXx5/ZsF1fx2/wBpEbxCzVgmcYVWM2WByck4I9DWBfa9f6hYrZzG2jtw4cx21pFAGYAgFvLVdxAJxnOMn1ovPEGo381vNdSQtNblWSZbaJJCRjBZgoL9B94mmpQUr20uS1Jrc6i7bTLr4nwWSNEttDeGGOP+xoVjD+btEboki+YnT5mbd7Vkab4ZbxBq2oWVlcRx38MrNHAYtsboGw5DZ+XaOduDkA4OcA5lrrt/Z6y+qwvC167mQyS20cmHLbtwVlIBzzkDjtUsnibVXknkSeKB53SSRra2ihLMhypyijvz7kAnJAqU1Zc3nf52Kd7u3kUb2O2ivZY7Gd7m3ViI5nj8suPXbk4/Ot6w8DajqGhDVYZcQlGfH2G8fhc5+dISnbrux6kVg3t5NqF7Ld3RQzTMXcpGqAk9TtUAD8BUFR0K6gBlgPU10snhKOS8mtdO1Hz5ra6W2n8yDy1XO75gdxJxtOeB7Zrm1OGB9DWzq3iW7vdTlmtJPs8AujcQiOFImBydrMVHzMAepJ6n1reDpqPvrqZy52/dBdEsp2tZLXUz9lmmaF5bmERGNlAbpvIIIPGWHPXHWrWnaHp6+JDZaib0ReQ8iCS1CF8IxzxJ93jIIJDY9Oay5tcvp5opJTARCSUjFrEI8nqTGF2kn1IzwPSmtrV+2oQ3vmqs0A2xbIkREHPAQALjk5GOcnPWmpUk726/hb176icZtbla5W3Scizllli4w8sQjY/8BDN/Oug8OeFYNd0m7umvLlrmF9sdhYWyXFxINuS/lmVG2DuVDY5JAA5y7XX9QsdSe/spIre4kiaFjFbxqu1l2sAoXaMjuBmpNI8S6loSEaZ9kjffvWaSxglljbGMpI6F0I7bSMHkc1g+tjRdLm1p3gqyv9M04/21JHqepWc93b2gs8xgRNICrybxjd5RwQp5644JivXS6+FlhcSW1os8OqSWyzRWsccjRiFCAzKoL8knLEmm3HjW7j8NabpWmMsHk2UttdTNaxea2+aRyFmwZApVwCAQD8wxzzRfxbqsnh9dEb7D9gXkINNtwwbAG7zPL37sAAtnJ9aUtbpf1Z/5FKyafr+Rqa9ZaXHpXhaRZ9thcW8u+4h0xY7g4lYEuvnESEHgHcvy4qx4q8M6FF8RV0Lw/c3SCW+S3eKe2CpAGKgbX812fqeoWsPVPFuq6xpcOnX32E21v/qVh023haPnJCskYYAk5IzyetNu/FerX13Z3dzLA1zZOrxXCWkUcrFcbS7qoaQjaOWJprf5kvb5D59Wsodfu5oNMgez8mS2t4GUfKNhRHJwcuOGJ6k+lUNWvYtR1Wa7t7SOyjkIKwRABUwAOMADtnp3p2s3Npe6rNdWETwRznzGhbGI3PLKp7rnOM84xVGsY0oqftOtrf10+Zo5acq23NjRdbtdLgaO60i2v2MwkDTBSQNjrt5U8EsrfVR9RJptvBqXhfVITDGt1p6reRTquGZCyxujHuPmVh6Yb1rDrUt9Uhs/Dd1ZWySfa751W4lbAVYVIYIvcktgknH3QO5pxpxjKUluxczaSeyK0ltZro8Nwl/vvXlZJLPySPLQAYff0OTkY7YqpWxda/53hO00GCBkhhuGuZJJJA5aQrt+XCjauB0O4579qx606k9AooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKANXSnhlh+yR+VFeSyYSSaBZVcHgLyDt57gc55xTjHZRaATNayNOtyY2dZVHO3/dPHtn8az4b+8t4TFb3U8UbclEkKg/gKbDd3Fsrrb3EsSyDDhHKhh7461m4ttnVGtFRSfn0/T/AIYt3EFjb2sQYXBnlgEgcOu0Me23Gce+asyQx3cejRBplhlYx7WZSU+fBwQo9c85rHZ3fG9mbaNoyc4HpVl9Tv5EVZL65dVIKhpWIBHQ9afKxRqw1TXRL8n+n9WNCPS7K4e3aBp0jaWWN/MdckIobOcYXOe+cepqnqcFpbtCtoW3FMygzrKFOTgBlAB45/Gm6fqL2V0krb5ETcQgfGCwxuB5w3TnHanalqR1DyQRLiJSA80vmSNk55bA49BilaSkuxcp0ZUm1pL09Pu6mvoPhaLXtFeeO5aC4iuDE5fBTDJ+7GOoLONuc456cc3b/QfD2ipNJqC6ncLHeLaFYJ40K4iRnbJQ5IYsAvGeORjnk4b26toXit7maKORld0SQqGZTlSQOpBPHpSz313db/tNzNN5khmfzJC25z1Y56sfXrW7kraLt+n56nDZ9TftDA3w/wBYS1e6Ty7q3MgZ0McwJfaduzcpAHZyDmp9Yi0M+FdCNrptxDdXMUgE5u49u4SkEyYiBb25GBgc45w7bxDrVnY/YrTV7+C0wR5EVy6x4PUbQcc5qGPVtRh02TT4b+6jspTmS2WZhG545K5weg/KnzLr5BZnQeK9B0DRI5rWy1J5dStZxDJCxkbzBzubBhQJggcBnznrxk4WjWEOpapHa3Vz9mjcHMuYxjAz/wAtJEX82H49KS61rVL6yis73Ury4toceXBNOzomBgYUnAwOKpVLd3ca2NfxDpFro9zDHZ332xZELM26A7Tnp+5mlH5kH2qPRdeu9CeZrIRkzeXu8wE/ckWQYwR3Qfhmsyisp041I8s1dFJtO6N6w8Yalp0txJAsBa4ujdPuU8OVdeOemJG/IVTt7O3k8O3l21tqD3EM0apNFGDbIpzkSN1DHjH41m1pRa5cQeHp9Ht44ooLmRZLiRdxebacqDklQAT2APqTUxo04NygrN2/AbnKVk33/H/gmbRRRWpIUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUVc07SbzVWlFlGrLCm+WSSVY0jXOMl2IUcnuaqyIYpWjYqSpKkqwYcehHB+opiuhtFFFIYUVZl067hW1MsWz7Yu+AFhl1ztBx1AJBwT1o1DT7rStQmsb+LyriFtsibg20/UEimK62K1FSQ209x5n2eGSXykMkmxS2xR1Y46D3qOkMKKtRabdzaXcajFFutbZ0jlk3D5WbO0Yzk5welVaYBRRToopJpVihRpJHO1UQZLH0ApANoqW5tbizmMN3BJBKOSkqFWH4GoqE09UAUVPbWNxdxXElvHvS2j8yU7gNq5Azz15I6VBTaa3EFFFFIYUUUUAFFPjhllDmKN3Ea7nKqTtXpk+g5FT2OnXOotILVY8RLvkeWVI1UZA5ZiB1I71Si27JCbS3KtFWRp9ybOe6WMNBbyLHI4dSAxzjvz0PI4qtSs0AUU6OMyypGpUM7BQWYKOfUngD3NWtT0q70e7FtfoiyNGsi+XMkqsrDIIZCQQR6GjpcCnRRRSGFFSLbzPbyTpFI0MRAkkCkqhPQE9s4P5U+ezntoLaadNsd1GZITkHcoYrnjpypHPpTAgooopAFFT3ljcWEqR3cflu8ayKNwOVYZB49jUFNpp2Yt9UFFWLWwub2O4e1iMotojNKFIyqAgFsdSBkZx0HPSq9IYUVctdKu7yxur2BIxb2uPNkkmSMAkEhRuI3Mdp+UZPHSqdABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAdZ4b1Wxs/B+vwXNpYySskOxJpZFa4/ej5cBxnb1+XB9c1oad/Yo0azaT+yfsBspjfLJ5Zu/tHzbQmf3nXZjbxjOa4Oir59LGXs9d+t/yOo1zU7C20+zs9OstNmW40yH7RKIlaRJu5DLyrDHI75OQe3LjGRnpRTkR5ZFSNS7scKqjJJ9KTleXMXGPKrI6rxAJz8SrjyvsmzzR9m+0+X5PkbB5f8ArPkx5e3GfbHNat0uj6f4l8S3MY0aW3azaTTlDQyx79y42oCQG6/Ljn0Irj71dQl+x2l3JHM0S+TAqyxuVG7O0lSTjJ4B6dqoOjRyMjjDKSCPQilGaUbLz/yCpRle8tNv8z0aDU7C28QalDpkukQpe6OGTdHAIvtBjTKbmG1RkHKEhc9RXn175n26bz/J8zed3kbPLz/s7Plx/u8U22g+0zCPzY4sgndK21eBnrUVOUuZ/wBd2KFPkV/60SOr02z+1+Ab9JW0dZhLG9r5k9rHcbQX8zkkSf3cA9ewrlVwHG7kZ5pKKG7u5VjpNcvfDE+mbNFsvJut4O77JLHx35a7lH/jv4iqHhua3h1fF3IYllhkiWQEDYzIQOTwOuMngZ5qleWNzYPEt3H5ZmiSZBuByjDKnj1FV6zlHmTiweqOvWRLrxH4esrSHS2njcRiGdvOthukOxJGXO8c5OO7H6DmdShe21a7gmESyRTujCH7gIYg7fb0ptpfXdhMZrC5mtpSpQvDIUYqeoyOxqClCPKkvX8QSsrG/oEAuNL1KKU6cFeEiE3MkCSCXK42s5DAYz04rBYFWKnGQccHP60lFbSlzW8lYSVrnR3N1aP4PSLRpo7XaV/tC2lI86ds/K4f+NAf4AF28Ehsb6zPD8STeJNNimRZI3uo1ZHGQwLDII9Kqy2k0FvBPKm2O4UtE2QdwBIP05B61d+xzaTDZ6kL2CK5bbPBBhjIBuOG+7s6rnBP4VUFyz5mtExS1jyo3x9g3W66imkpqGZzCIDEYV+UeUJCh2n5s/eJ/wBrioUe3XVbUy2+mT3f2VhciKa3jiVt3ysNwMTMFxwAfzyRzd7a/ZJlQ3EE++NZN0D7gNwzg+46EetS6RpkmsanHZRTRQM6uxkm3bVCqWJO0E9FPQGtHWaeq2/TT7/Mj2aez/r+uh0NjdrZavq9nb3enTGe3Iimkt7dI2k+U7cnKAcEYB2kjvwarWWrzWekazDKdOE26Mootrdw58z5sYUhgB0xkDtisaPT0l1GS1iv7QoiswuGZkjfaM8blBycYAIHNTaVox1aK6MV9awzW8LzCCUSbpVRSzbSqFeAP4iKn20rJ+T+7Ufs1e3oXrO3+0+ELpZG00SCRHg3ywJNgbt/JIf04P4VPdfYToDGP+zxqogQT7dm0x5P3O3m/d3Y5x053VzFFL2qta3T+v67D5Nb3L9xpTQR2DLeWUzXybgkdwMw/NjEhOAh78npXZTWunR+KtGl1W40+4tk02OACO/gkUXCQ4UOQXCjfj5mUr65Ga8+oqFKy+d/z/zKav8Ad/X5Hd3moafb3moXH9laTBcxaYPJVp7W7SWUzphgsSrFvClvlC9Bkg5OdOwttJnvNSv4U06NCtj+9FvavErtDulRVnZIlJYc7TuGDgYzXmNaOm69f6Vby29o0DQTMrvFcWsU6FlyA22RWAIBPI9auNRJ6icdP68v8vxOzi1S6UeJtLjtdH067a7jlgtLuCzRFQM2VDuoRsArjnpkr1NVLXU7GTS9P069GmPH/ZF55ryJGzpMHnaNQ/VDnaQFxncOoxXGXl5caheS3d7K008zl5JGPLE1DUc75bf1tYdtbm7PaTnwDa3nlacLcX8kXmop+1F9gOHPQpjp7k1iwBjcRiPZv3jb5m3bnPfdxj68VJPfXd1DBDc3M00VuuyFJJCyxL6KD0H0qCpW9x9LHS6xFYQara3N7Db3Fu9vGssel3kEZ80KNx+RXA5/2cHsa2X1Pw2fi2LzyLryv7UD/av7Sj8rd52fMz5X3Mc4z0/irgaKqcuafN6/iJRtHlOp8NyWsvxE09tKgmgtfO/frczrL+6wfNJYIo27N3GOmea5iXZ5z+Tny9x25647VNa39zZR3CWspiFzH5UpUDLISCVz1AOOcdRweKr1Fi27ts6IbW+G8htwybdSjFyHIbzG8uTYVwBtAGQQd2Tg5HSudq3a6pd2dlc2cLp9nugPNjkiSQEjIDDcDtYZOGGCMnmqlD3b/rYXS39bhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABUluzJcxskohZWBEhz8h9eATUdOiikmlSKFGkkdgqogyWJ6ADuaAvbU2JL+C3uLW5hmja7WXdNLZq0asnHBBA569AB60smpGPUrm4Opm5LQyCFwXJQk8D5gMH6cD1qPUtAex1q10yKSVprhY8/aLZ7co78bSrc4B79DUevaba6RqkthbXct1LbyNFOzwCNQynHy/MxYdeSB9Kl0kt/NHQsZJvTyfX+tfMl0vU5G1I3F/qJiHl7HL7yZRggA7Qc496fp+pJpy20CXnyLeF5mjDANHhfUAkcHj26dKpaPpb6vf+QJFhiRGlnnYZEUajLMR346DucDvU9p4c1LULCe9060uLi3jcIpWFi0mc8gAEcY554yKapczskCxU4Ja7PfXr8zVspHi0yCK0m8qaaKYxx+ayK4JYbioUgkAcEsMYHpXLI7RyK8bFHUgqynBB9QanF7eRW7Wy3M6Q8hohIQvvx0qZ9D1aLSE1WXS71NOkO1LxrdxCxzjAfG08gjr2qYx5W2OvWVWMY9v8l/kb3inxBPruk2EjeIpbhVt4o5tOmknLCVVIaQ5Xyznrndnn61g6Nfw6bqkd1dW32mNAcxYjOcjH/LSN1/NT+HWp5fC/iCG2tribQ9SjgvHRLaV7OQLOzcqEOMMT2A61WttI1K9aBbPT7q4a5kaKARQMxldQCyrgckAgkDpkVq23JvucqVkkW/EOr2usXMMlnY/Y1jQqy7YBuOev7mGIfmCfer3h24lt9B1B4dUXS2+1W4M5D5xtl4GxSc/l3Geag0vwxI/iy10LxIt/os1y6RKHsd0is5AUlHZCF565/A1Xh0LV73UrzSdFtL3UmgkYyRWkDyEhCVDlVzjr17ZqqVT2buut/8AginHnVn5G8niCxa6M9lf/wBmQi9kmuIPKbN5GSCBhQVPAYbWIA3deTVGDVLZvDdxaS6gLaIiRora2eZZHYnhZF2+Wy9O4IHfjFZdho0lyb57tms4dPjLXDuhLK2dqpt4+YtxjjHJPQ1NaaPY3GiteS6xDBOI5mFqyjcSmzaPvZ+beccfwnr2VTGciXN102b39PT0FGhd2X9f1ct3eu3N54bs4xrs0ctsrJLbPLLmX58qQQCpwMdSMbfpUesa9c6mdMj/ALWuGWKCPzGlkkKxzAnLnuSARyATWM1pMtil4UxBJI0SvkcsoUkY69GX8609U0awsbFJ7bWIrx2kjUxIg3BWiVyeGPRmKfUdewU8ZeSi3v69PyHGj1Xmal3qVv8A8JFY6iuvRylLdI7hxHMzPtTDAh0G7dyOfXnFTade2174qtHsJNlqthcCOzw3+i/uJMrk8Nk5O7qc881g3+jRabrcFrc3n+g3ASWO9SIkNC/R9mc5HOVzwQR2qO5h1Dwzr0sUdw9teWjkLPbSFT04ZWGDgg5B7g1pOq5pp9W38+pMYKLTRc8K3kdlfyvcaotjA8TpIjeYRNlGA4RTnBIPP4U/wzGsWtXyJKkyrp14BIgIVv3D8jcAfzAqrpdnL4k1qU6jfTA+VLc3Fy4M0hVELE4JG5jjHJH1qtFql7YR3Vrpmo3kVncErIiSGMTLyBvQEg8Hpk9aiU248r7P8SlFKXN/Whr2VreL8O9TuHvmtbN7qHZbPbjbeONwykh7oCSQPXmubooqOtyulgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKfEIzMgnZkiLDeyLuYDuQCRk+2R9aZRTEdfqPiexHiDSdT0e61GM2kMNvMDEsRZEwDgrIc7gPunA9zWL4k1qXXtfu7157iWF5nMC3DkmOMsSFAyQAM9BxWVRTlJy39fvJjCMdjd8Ksksuo6aZBHLqVk1vAxbAMgdHVSf9opt+rCq+n3NrBY3+nambiATMjb4og7IyE8FSy/3j34xWVVpdLvXhhlS3d45wSjLzxu2c46fMQOcdR604c19FccrWs/6/qw6P+zP7IuPNN2dR81fI2hRD5fO7d33dMY4612OpeO7W70ONLSVrW4azt7S4sho9qUmWLYCDdZ83afLVtpU4PGcDNct/wjeqeWzmCMBTIADcRhmKEhwo3ZbGD0z+tJNpYi0O0usN5txMyb/PiaPGAQDg5Vued2OMU+SaV7dn+n6i5o3/AK9T0WTxNpDWF94osP7Qnz4nsb+5iulRCmBM3lJhm3AYI3HGePlGOcWLxL4RtE0aySHUr6zsrq8uZnu7SHlpY0WMiLeysEZASrNhsehwOZ1Pw1dafJbIkkFy1wkZVIZ42cs4zgKrEkdt2MGqV7pd1YIj3CxmOQkLJDMkqkjqNyEjPI468ilKnKDaatbT8Ev0KU09U/61/wA2dreeLvD994t8OX8sl9Fa6LAgdoNMt42nkSdpOIUkVEUhuxOD2brVKx13QLTXNVZ76+l0nUHDy28+jQymf5ixVh9oBjxnh0fdyfu1y2n6XqGrTNDpVjc3sqruZLaFpGA6ZIUHjmm32n3mmXRttStJ7ScAExXERjYA9DgjNRs18/x3Hvf5fhsdBayWep6f4i0/SInthPOl7ZWzvuYxxmTMef4mCSZ99h6muXrY0W30CaBjrl3cwSCYACEcGPY5J+6ed4QfQn6iu9jE/h+O/ty5kjnMNyrEELkZjYccAgMOe6+9Ye2ip8rT6K7Wn3/L7/UvlbV/UvT+J5ZvC8WmGG1EizSF2FhABsKIBhguQ2VbLDBPHJ7YSqXYKgLMTgADJJrUm8Narb6b9vlt0EAhSc4njL+W+Nr7A27aSQM4xnjrT9Vt9Ai09W0m7uZboyJuSUfKFMSl/wCEciQsPoPxOVGVCD5aKum3e2qv5223KkpyXvdF1Luv20s11ovh+1AuL2ythbSBGB/fPIzlM9Pl37T6EGqvi27guvEDLaSrPFawQ2gnU5EpijVC4PcEqcH0xWIBkgVa1PT5dK1W60+4ZGltZWidoySpKnBxkDjiuz/g/wBfiZGx4Ozc3l9pqqGa8sZ1jVVHmtII2KKjD5uTwVBw2cEGuflikgmeKZGjkjYq6OMFSOCCOxrY8L6dYatqj2WoJckyQyPFJBMqbGSNn+YFG3A7cYBFN0jR0v8ASdUvJVkcWlvvjENxCrK25fmdGbeUweqg84qmm9fL8riv08zHorXh8K6xcaUuoxWqG2eJ5kJuIw7ohIdlQtubbtOcDjr3qOTw7qcWmm+eGPyhGsrIJ4zKiNjDtEG3qpyPmIA5HqKHFrdBdMzKKKtajp8umXEcM7IzSQRTgoSRtkQOByOuGGfepGVaKuaZHYSXEg1WWSKIQSFGj6mQISg6HgtgH69RVqXSYtR8QTWXhfzLyAKXiMrBWZVTcxJIXpg9h0rKVaMZNS0SV79PvKUW1dd7eZk0UUVqSFFFOi2GZPNyE3DdjrjvQ9EIbRWtrkGhwNGNBuri4HmTBzMMYQPiMj5RyV5P9OlUtNsZdU1S1sLdkWW6mSFC5IUMxAGcZ45qKc/aRUkmvXRlTXI2mytRSspRyp6g4rc0PQY76xu767KNDAo2xLfQwMzFgOS+doxnqOe1bQg5uyIk1DcwqK0xpsbaBc6gEkysypHtnjYIp3ZDrnfnjg4APNNfQdQjsftbxRiLyhNjz03lDjDbM7sc9cUckrXsHMtjOorQl0S8t5Yo5zbRvKcBWu4gVOM/MN3yf8CxT9c0SXQ7+S3knhmVXKq0cyMxx6qrEr+NDpySu0HNFuyZmUVZ02xl1TVLWwt2RZbqZIULkhQzEAZxnjmq7KUcqeoOKgoSitjRbfQJoGOuXdzBIJgAIRwY9jkn7p53hB9CfqK1rol7e2T3VqIJFRWcxi6i83CjLHy928gAE9OgzWPt4KTUtLdXonfs+pfI2k1rcoUVvWvhiY6FfajfgQrFZrcW6CePe+6RFBaPO/aQxIOADxz6vl8Lvp+gTX2rfuZo7qCLyUnjZlR1dm3oMsjfKMBsd+DWf1yheylfW3z0/wA9R+yna9v63OeorY1i00VZoY/DtzcXReaVG84Y+XfiIj5V5K4J/p0qhqWnXWkalPYahF5N1buUlj3Btp9MgkH8K3pz54qVmr99GTKPK2itRRRVkhRRRQAUUUUAFFFFABRRRQAUUUUAFb+keKDpdnb27WYnWKZncmTHmIR9zocfN82fpWBW9oOlwXuj6xcSJbzy21qZFjeaSN4sEfvBhSrdcbSRWtOc4NuL6f8AB/r/ACM6ii1aRnX+pNf29tG6YaHflt2d5Zy34dasyanYN4eTTlsrkSpIZhMbpSu8gA/L5fT5emfxrX0zQIYvBFxrU9tY3k7XCxxpcXyosabCxOFkU78gfKTn2rJurG2sPDFnPKnmXuos0sZ3HEMKMU6DqWYN16BffhNygnHvb/gBHlm7roPGvxrcadex2ji/sRGokMwMbqnA+TbkHGOd1Ra1rJ1Zo8SagyoSdt5fG4Az/d+UY/WrmraNFHa6Cmni1ke+jYfaIZpCJ38wrlhIq7Mfd4yOM5qzaeEYYfFy6PqV2lwyxTPNHbs9syMkTOFZ541C5wPmwRjmrlKpK8W+r+/qCUVqjn9P1GfTJmltktnZl2kXNrFOuPZZFYA+/Wm317LqF0Z50gRyAMW9vHCvH+ygC/pXSap4QiS6jexnWzsvsa3NxPd3AnjhJcptEsS4lyQPuKcEkH7pNU28IXELSveajYWtmnl7L2R5DFN5i7k2hUL8rk8qMY5way5WVzI5+tHSNQitBd296JGtLuAxyLGASGHzIwBI6MB+GfWtaw0iK3j8Q6bqthA95YWrzJcCV9yOrovG1thUhieQfrTbHwJrGoaB/a0CAQtE8yKYpTvRM7jvCGNfutwzgnHTkZipS542e1r/AI/mrFRlZ38yo/iLfHdr9lx9p06Cxz5n3fL8v5+nOfL6ds9eKxa6BvBuof8ACL/29G6SWqoruPInTaCwX77RhGwSBhWP6Gk1nwncaHbzzS31jefZboWtxHbO5MTkMQDlQDkKfuk46HBpQoKinyq39Jf5DdRysZFhqN5pd0LnTbue0nAIEtvKY2weoyOaveJPEV74l1ie9vZ7h0eR2hhmnaQQKxzsUnoB7AU7xFp9taz2l5pqNHY6jbi4hjZtxiOSrpk9drqwB64xmseq336CNjw1rFloepG8vLG4vHCMkaxXKwgblZWzlGzw3HT8asaTrejaYNSVtKvpkvYmgAGoIpjjJU4z5Jy2V68D2rn6KrmYrI37fxMts1rssyVttPuLFQZuWEpl+bO3t5vTvt7Z4sap4zm1XQkspX1SORYI4WSPUiLRggAB8jZ1IAzhsZ5x2rmKKOZtW/rr/mFle5LbXU9lcx3FnPJbzxncksTlWU+oI5FaviHxTqXiOSH7dd3UkUMUSCKa5aRd6xhWfB6FiCT9eprFoqR7BVrTri0trvzNQsvtsOxh5XmmP5iCAcjng4OO+Kq0UpRUk0/8gTs7hRRRTAKKKKACtXw74gvfDeswX1jPcIqSo00UM7RidVYHYxHUH3BrKopiauWtR1K91W8a61K7nu5iMeZPK0jAdhk84p1rf/ZtNvrTy932sIN+7Gza27p3qnRRF8uw5e9ua1pqdhb6Hc2E1lcySXDKzSrdKoBXdtwvlnj5ueefaqd/e/bngby9nkwJD97Odoxn8aq0VUpykrP+v6uSopO5saprcN/p8VulvOZI3B+0Xc6zSBQMbAwRTt5zgk9BjHOYNZ1G31S6N3HbSwXEp3Tlpg6McDlRtBX8SazqKcqkpXv1EopbGr4d8QXvhvWYL6xnuEVJUaaKGdoxOqsDsYjqD7g1U1HUr3VbxrrUrue7mIx5k8rSMB2GTziqtFZl7BXU6X40GmaCunJaXGRBPC3l3hSGTzAw3vGF+ZhuABJ6AcVy1FYVsPTrxUaiulqXCcqbvE6WTxXA9jcBdNIvrmzhtZLg3GVAjKbSqbeMiMZyT7Y6FmseJrbUrG+ht9Ma2mv7tLu4la53jeA+Qq7RhcuSByR6njHO0VnHBUItNLbzfl5+S02K9tO1rk1nHFLexJcTRQRMw3yS7tqj32Atj6AmrfiCTS5fEF2/h+F4NNL/ALiN2JIGB3JJ65PPNZ1FdZkFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFbGjeIW0a0u4I9Ns7kXkZimecy7ihwdvyuoAyM5xn3rHopptEtJ7l/wDtif8AsGTSFjiW2kuhdZAO4MFKgA56YP196sXN9bX3hiyglby73TmaKNdpxNC7F+o6FWLdeob25yKKNxpW2Ny+8SR39hZWb6Hp0Udkf3Rja4ztLFmU5lPBJOe/oRU58Z3Pm2Pl6dZJbWMU0UdpumaMrKpVxlpC4GD0DAA845OcG1WB7qNbySSKAt87xRh2UeyllB/MV1+reFNKuPHM+kaJdzQpG0jzC4hVEgjRNx2u0p3cA/eKDOMkDkWuZ6onRGUPFs4Yx/2dY/2ebf7P/Z+JPJ279/XfvzvO7O7PbpxSnxfcS+bHe6dYXdm5jMdnKkgjh8tdqbCrhuFJHLHPfJ5rWtfAFnd6h5MXiCJoSIcNEkczq0kvlBWEcrKOSDw5+U568VXufB+m2MM91ea3MtpGINjx2O55DL5nRfMAGPLPU8j34NWna4e7co2vi6aGfUZ7rTLC+n1EMs8k/mqShIJQCORQBlR2z71Wk1/z9LjsrvS7K48hGjt53MokgQkttBVwCASSNwbr6cV1+meFdHsWSw1lLG4uH1Saz3yPcJLMqpHtEOw+WrZf/lpxkjnANc/F4ShZILe41F4dTurd7m3thb749i7sB5Nwwx2N0Vh0yRniZKVv69fv/H7wTX9fd+hDP4xurjS5bM2FijzWsVrLcqj+Y8cZUoOW2j7g6KM9+1Vb3xDdakmoRTrBGuo3q3kzKrfI43jjk/L+8PqeBV668KwW1vdRDUmbU7O1W6ntvs+IgjbThZN2SwDrkFQOuCe+FY2b6hqEFpCcPPII1Oxn5Jx0UFj9ACfaiTlez/rX/NDVuW6/rT/I0PEOoW13NaWmnMz2WnW4t4ZGXaZTks747bnZiB1xjPNZFbviHwle+G4YZb2TcJmKr/olzD0HrNEgP4Zp3gzTtL1TXxbay0wiMMrKkUe7cVjZuTvUjGM98kYOBzURXM9P66lPRGBRXT6T4WsdXF3dRarJDp1u8cYmuI4IZHdgTjbJOqYG09HJ6cdcaFp8PrSaF5JtfTCvKFa1tvOR1SVI9wbeAcmRcfjyO9qnJuyJckjiKK63/hC7UGK2bV2/tC4iuJYYBafIfJeRSGffxu8o4wD746nRvPD+kTaI9vYW1kdRWws50EMs4nVpBHvaTzD5RU7+icjK9gaSg2tP6/qwOSTszgaK6xfBMV3dyWWlar593bXa2t0JrcxRox3AsjBmLqCrdQp6cVlappFlb6XDqOk38t5bPM0DefbeS6uAD0DMCpB65z7UrNK/9f1qO+tjIorY8L6EfEHiC0smkijhknjSYtcxxNsZgDs3kbmx0ABPtVHUdPl028a3meB2HIMFxHMuP95CRn2zUj3KtFbVl4Zn1Cxt7m1mVhKDvUrgqQ4XA/vHB3duAadc6Jp9nCGudVkVpDMIdtruU7GKjcd2QGIHQHGfz19lNK7XmRzxvYw6K2Z4Lb/hFbKWNlIN06Sv9lCyKdqkgNvO5RngELzmreo6Hp0upadZaRPOLi7ig+WaAKnzqCXLb2IPfGMD1p+xl08l96uL2i6+f4HN0Vsaro1rpxt2i1KOdJXKuA0bPHjHzERyOMc+oPB4qhqUFrbalPDp959utUciK58ox+aPXaeR9DWcouLsy001dFaiiipGFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFdZofh3RJfDkereIdQktYprprdDGW+TaoJOBG+48/dyvA6+lRi2RKSjucnRXX2c8jfDXXrb7VJPbW95biEEnaAWfJVT93PWopPDen3PheO/wBFla8mRYxeublU+yuxAOYTHuK8gBgx5z6U+Rvby/En2iT1OVrXfxTq0l5bXZnhFzbjCzraxK7jbtIdguZARwQ+cjPqa1fFfh7QdCSe1tNTkk1O1lVHhcMRIMct/q1Cc8gbnyO9c5prwpqVu1ykjxhxkRSBG9sEqw6+xoinzcqY+ZSjzWL8finVYboz20lvbOxjJFvZwxKTG+9DtVAMhhnOOehyKuWnjG8ttIuYnMc128sHkvNaQyokcYlyMOpAbMgwcZ6810VpZ2r/ABvkh1K4muXS6yhkhRvNYJn58bQuOuQp6dO9cTrd61/qjyvqF5qAxtWa8GHx6Y3NgA5707yUU7ijJSk1boizb+LdZtkcR3Ubs873Hmy20UkqyuBudZGUsrHaOVI6ZqOHxNq0GmiyiuVESo0aOYUMqI33lWUrvVTk5AIHJ9TVrRCLLw3rGqxKTdxtFaQvj/VCUPuceh2oVB7bj3qWxaN/h3qywtcxvHc25mXzEaKXJfb8uzcpGD/Hg56VN3qr/wBf8MaeZQn8S6rcab9hluVMRjWJmEKCR0X7qNIF3sowOCSOB6CsqussdI0ptNsb6wR9QmgeF7/dcqFhzIAVMDRgspyBuV2HrjOK6TSvDUWjeJnmcQuW1KBETy8G2b7UhCrn1jKnPHDEdqvkk5K73I5kou3Q8vqxY31xpt9FeWUnlTwtuRtoOPqDwR7Hg1vX9jo1rZ6bq9pHftBNdTwzRSToHYx7CHVthC53/dIbGOp61pyXV5YfGnNvf3PmSalHHJNvCPIrOuQ2wKCD3AAHtRCN5JX3/wCAVN2TOci8TalBPcSRfY1W5CiWH7BAYW2/dPlbNmRzzjPJ9TRF4n1eCLyoblI4/nwiQRqo3OrkABcAbkU4HTGBxxWzp+h6XfTa1qWuXZgt7a8EIUSPHkuXOSyxSkfdxjaAc9RjB5nUYrWDU7iLTrk3VokhEM5QqZFzwcHkVClKyd90NpXaNq98Y3k2k2trauscn2eWK6mNtEJHMksjsFkxvCkOAQCB1GMHmlceJtVubAWck0SxeXHEWjtoo5HRAAitIqhmA2rwSeg9Kv2HhnTrvQhfTav5MxRm8jfZjBGcDD3Kvzj+5n0B7lx4Z06Hw/8Ab01ffP5KyfZ99n1OOMC5Mnf+5n1AocnqCVynceLdbumjZ73Y8cqzeZDCkTvIvR3ZFBdhzyxJ5Pqaranrl/q6xpeyR+XGSyxQQRwoGPVtqKBuOBk4zwPSk0K2hvNesre5GYpJlVlJxu56Z9+n41s6pKlpZ2Wp2TxR6hb3bKJreBYkJUBsKABuCkgbiOc+mKylVtNQfX+v0Juk7L+tznbO7nsL6C8tH8ue3kWWN8A7WU5BweDyKiYlmJPUnJra8XWsFt4gZ7WJYYrqCG7EKjAiMsauUA7AFjgemKseDS1veX9/BIPtVpYzvDGhIl3GNh5iHGBs+8eQf7oJq+l30L9OtjLs9c1HT4oY7S58tIJjNGNinDkbSeRzx2PFVprua4hiimfckIYIMDjJyfryajllknmeWZ2kkkYs7uclieSSe5ptVzSas2KyT0NBtbvX0sae32b7MOii0iDA8DO7buzwOc5pp1m+MNvH5qA2pUwyiFBIm3oPMA3YHpmqNFP2k73uLlj2NE6s11qEE+pRI6RPuYWkUVs7d/vKmM+5Bo8Qa1N4h8QXeq3MaRyXT7iidBwAPxwOtZ1FS23qxrTYKKKKQwooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAq5Y6vqWmBxpuoXVmJMbxbztHux0zg81Top3aE0nuaEXiDWYbT7LDq99Hb4I8lLlwmD1GM45yajn1jU7mxSyudRu5rWMAJBJOzRrjgYUnAxVOii7FyrsXLjWNTu7NLS61G7nto8bIZJ2ZFwMDCk4GBUFrd3NjcrcWVxLbzpnbLC5RlyMHBHPStDwxaW1/4msrO9i82K5k8nbuK/MwIXkf7RBrrofCeiWf2ATxvei5uJEYtKVIMMLeag28Y8zBB54x75tRbXNcWi92xxy6preo6pbyLfahdX6nZbsJneUE9lOc856Cs51ZJGWQFXUkMGGCD711vhmSHVvGWlDS/DaoyuonS0muSEHmD98CH3oVB67iO+K0NBtp9P1vxHpVzoP2i9mtJTBBdLOJZhvU7AFdSwIBbP3jjr1o5XZP1/D/MLpO3p+JyOl6qdPju7eWH7RaXkXlzRbtvI5VgecMrYPT1HQ0tt4h1qzsfsVpq9/BaYI8iK5dY8HqNoOOc12GheH9Mn02e51Hw/fXFz9seK5srG0mmeyQBSBjzlZCcthnEg+X2IOXZeINXg8CanFaatqEUMN7bxQoLlxsjZJ8qADgA4GQODijlst+n9fmNO5gS65q09hHYz6peyWkWPLt3uHMaY6YUnAx2oOuaszu7apeFpJVndjcPlpF+6555Ydj1FdtL4c0OHRrIrpWoXKzR2zDUorZ/JZ3K7w03nFcZLLtEasCAM8EnRm8LeHZLm0hi0dYg15HG7C4lJZPtjwEct3Vckjv0x0q3Tle1+tieePLc80t9U1CzaFrS+uYGgdniMUzKY2YYYrg8EgAEjrirR8Ua+14t22uakblUMazG7k3hSclQ2c4z2rV8U6VBY6PaTSaM2h30lxKgtHaTdJCAu2RhISQckjIwDg4HFZfh+30i4vZF12fyIBHlG894stkcZWGU9M/wj69jlqna/9WLf9feMXxJriag98ms6gt5IgR7gXTiRl/uls5I46VQmmkuJnmnkeWWRizu7EsxPUknqau63Dp0GpsmjTeda7Rh/NaTnvy0UZ/8AHfxNdR4e8J6brui6bM26G4mmktflc4mmDBwDnoPL3DjHO38XCLm7Ck1BXOHqU2twtot00Egt3cosxQ7GYDJUHpkAjj3rqdUOg6dYW8sOhxXC3rXWJGuZQ0aiRlj2YbGQMfeDZwPcmS70m+Pw2sL46HcxRQ3bM7AXHlSR7ExKwLFRuPG5doOMUkrxcvT8Wht2lb1ONBwcjg1dGpSXOoQT6w8+oxxsN0cs7ZZc527jkgGu21i1t9YvfDslzo0NlpNzDaRSapD521Bja0Qd3KDGCORkY5PWqPiVF8N3VnNolhq+gXxZ0aUwS2iyJx90tNIWPXJDAYI471fsve172JUk/uOU1TUZ9X1Se/u9vmzvuIQYVR0CgdgBgAegqfQ9VGj6i08kBuIpIZIJYw+xmR0KnDYODg8HB+hrtZox4i+Imvxa5Lean9heY2Vl887N+9AKogkQkBSTtVh0zyAQZrPw/wCHXlvGl0K6TbMyeRemS3eLbaPKcIHJALIMbmY7TzngiVB8t+lvw2HzXf8AXqeaymMzOYVZIyx2K7biB2BOBk++B9KbXp0fhbTTdJ9n8NG7tpNRMVzP50wjsoPKhcncGwuN7EM5IwDnPbzW4WNLmVYH3xK5CMf4hng0pRcLJjUuZXX9f1YjpVVncKilmY4AAySa6i8stATwHZ3EF3eG6a7nUM2nxqXYRwnYzCUkKM5B5+8flHfl1Yo4ZThlOQal9kPpctSaRqUUyRS6fdJJIXCI0LAsUyGAGOcYOfTFVK1JvEmq3N/bXlzdGWa2naeMlQMOz72PAHU1sDTdOg1HVL17IXVidP8At1lE7sijdLGoBKkEhSzKRnnaenBHG686VvarV9u97W1t3X4m3JGbtD8Tmraxu70sLO1muCmN3lRlsZIUZx6kgD3NRSRvFI0cqMjoSrKwwVI6giuh1a6k8Pa039hf6FHdWtrM0S/OFJWOXAL5OA4B5PbHNc/PNJc3Ek87b5JXLux7knJNaUak6i57e60mu/z6ESio6dRlFdTp9loEnga/uLm7vFuVubcMy6fGxjYrN8isZQSpxyePujg9ucsvJ+32/wBqXfD5q+YuSMrnkZHtXVGPNPlM3orkNABJAAyT0ArtJfDGnWUjiUNM32yK1ZGcjy3aTdgY6gx4HPfP4Ysj28+qx22maEjTRTuFjjkmczKOgYBs5GCcqV+la+xatzPf/gf5maqJ3sZE0MtvM8NxG8UqHDI6lWU+hB6Uyu4S3fTfiPcR3OnswufNFuboy7myjAbWLAtk/Lk56+tVdK0i3nkvnv8ARJkuoWjC6dDbzSMiEHL7DKr9QvO4gZ6cjFLDyls+/wCAvapbnI0V0Npp0VxL4gWz0Wa6jtbd5EM8/lSWShxl2XPzkDgr757Vz1c3U26BRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFW7fS7u70+5vbdEeG1AaYCVN6qSBu2Z3EZIGQMDPNVK3/CZRZtUadS9uunSmaNThnXcvCt0U5xyQw9jR0bDqjAopWwWO0ELngE5IFd3q0uiL4WSHS9PsLiN7OMfaDe28c0U2fmJQqJic543FcHgAVSjeLZEpcrSOR1HRr3SY7aS9jjEd0peF4p0lVwDgkFCR1qjXa6tDHHpPhZHk069+x5jubddRhOS0u4KSHOAR1boO9aUyeHG8U6Vc3k9gsEqSs1gq22y3kx8geWEbGUt0LjgD5hgmrcNfmZqq7ao84orf8AFs1vNd23kada2TrFiQ213BOJeThj5KqintgAdqwKze5rF3VwooopFBVnTb6XS9Utb+3VGltZlmQOCVJUgjOMccVWopp2dxNXVhWbcxY9Sc0lFFIe4UUUUAFFFFABRRRQAUUUUAWpNQlk0mDTmVPJhmkmVgDuLOqA556fIP1qrRRT3AKKKKQBT3nlkhjikldo4siNGYkJk5OB2yaZRRZMAooooAKKKKACiiigAooooAt22q3dnY3FpayLFFcjbKVjXey/3d+NwU45UHB7iqlFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFW7fVLu00+5srd0SG6AWbESb2UEHbvxuAyAcA4OOaqUUAFFFFABVi/sbjTL6WzvY/KuIW2yJuBwfqOKZa3U9ldR3NnNJBPGdySxOVZT6gjkV3114qtbjxvBq17rpv7FxI0FvKbg/YHaPCsy4GMMRzExPGRyBVximtyW2jzyivTrLxvbQa01xfalZFv9FT7RZLdOXRbjdIGeYGQkIWH+6do9KX/hIDf6Te3tl4iXTZd1lHNeusobIFxlQUQtnGOmBgYzjiq5Fa9xcz10POW067WC0maLEd4SIG3D58NtP059am1TRrrRzAt6EV5ldtitkptkeMg9s7kPTIxiu4l8R+F9QmV7gpEJL+fAkt2zBExV1lG0HBLqMhcnDMOlV5PGVu8gt/7QcWMthfJPDsba8sjztGGGPm+8hBPCknpzScY8qd9f+B/X9XBN3OKex2aTFffarZvMlaL7OsmZVwAdxXspzgH1BqxquitpdtZXAvLa7hvY2kie33jG1ipBDqpzkGtm8vLe6+H1pY3HiKG4urW4aaO1cXDGOMoqiNSY9oIIPAO30NWTdaJZw+GHm1O01JNLkP2q2ihmy6tMX43xqpAB5BIz096fKua1+35f5hd8t/U4uiur8a69/a62sf23T75YndlltjdtIAccM1ySccZCqcA59ayfD+q22kXsk15ZfbEaPaE2wnByDn97FIO3YA+9Z6XKMqrEVjczWFxexR7re2ZFlfcPlLZ28dTnB6VY1vUYNU1Nrm1tfssZUAR4iGMd/wB1HGv/AI7+dbnhjxHc2nh/UdKXxDPo7SNFLbSmWYRqQTvUeUGKlgR2wdvNOKT3CWmxydFd5a+KLa38GpZWl1p6SLBNHdW959rJuHZmO9VQ+U5IYYMgBBUdgK0dT8bafd6Rd2MepM8ciSIkXluFI8iEKOnTzFkP15PUGtFTTurk8zutDzmysbjUbxLWyj82ZwSqAgZwCT19gatabod7qkMk1uqLDGH3SO2BlYnkIx1yVRscYz3Fejar4jtLHxRdQaxra3qf2wGjiSKUrp8S71fqg5IYAhM5wSTnGcm38R6Fp8Eb6bNHBIpnBRYGwStvLFE5BXad+5c9eSxNLljyt3/rT+v6YczbWn9a/wBf0jhbG1+3ahBa+fBbedIE864fZGmT1Zuw96vaVoTavfz2cN/aRTRK7IJC5E20FjsKqR0UnnFdJZ+Jln8ReHdSn8QPaz2tqq6hdSmYvLidiYyyKS5KFevGOCaq6M+lWfja5vZ9esltQJikoiuCJPMR1AA8rPBYZyB7ZpOKTXz/AOAF3r8jkKK73w34gstC0WSytNQ01LqO6d5ZbkXoiu4yq7QBCAWAwwKyrj5uOpFcJI2+Rmwq7iThRgD6VMklazKTuKYJVt1nMTiF2KLIVO1mABIB6ZAI49xSRIZZkjBALsFyegzXSXev6bN4LtdPj0ewS6W5mY7WuMxgpEBICZCpYlTkHI+UcDPPM1L7IfQ37zwhe2OpWtjNdWZlup5YIyrttDxuUwTt7sOPrzisFlKMVcFWU4IIwQaFZkYMhKspyCDgg11v9sw2V1f6xZXaW9zqenfKsJ+aK482PeOPuk7WcHjGRg5FcUp1qVk/eb+Wt/n0/I2tCb00/wAjE0XQrjXHmW1mgjMPllvOYjO+RYxjAPdx+Gao3du1neTW0jKzwyNGzIcgkHGR7cVpeJtQi1TWFu4ZTMXtYBLIQQWkEShyc8k7gee9ZFa0XUkueel0tO3z6/cRLlWi+8esErW7zrE5hRgryBTtUnOAT2JwcfQ0yumsdf0238G3lhNo9hJcvPAy72uMyhVlBckSAAruGAMA7jwe3P2VwbS/t7lesMqyD8DmuqKTnyvYzeiuiGlUbmC5AycZPQV2cus6HbyP9gkVSbyIM6xMPNiEnmFzx1DcY64A44rFl1y/v9UTzNXeCOKZ3gnkZx5AP90qCyjAAwBj2rX2cFa8t/8AgdbmalJ30KLaXMdUksLV4buSPdh4JAUcKCSQxxkYBqnXXnW4LLxzNf2mrk2l4X8ySDzV27lIBcFQTgkHjP50mla2lnJfefq0M99I0ZS/mkutroAcpuTbIOo4IwcewqlSg/tW3/rcXPJdDkaK6zSkvL228UX0V7Hp9o1s3mtFakwXB3giFWb7hJ5H8XHTrXJ1zdbGy2uFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVraTpFtqem6lM13LFdWVubhYhAGSRQVBy+8EHLf3T9aya6Dw3faPY2epLqlxfRyXls1sotrRJVUFlbcS0i8/LjGPxqkrp+j++2n4ifQpx6JIfDM+sTC5iRZkjh/wBEcxTZzuPm/dBGBx1OfaoJdF1SDTxfT6beR2Z24uHgYR/MAR8xGOQQR9a1dPvdDg8Lajp9xd6gLi8kjddlkjIvlltoJMoPO4Z4496nl8VwSR3ystxIs2l2llEj4Kq0RiLZ54UlHxj+90GTVWi93/VhXd/67/19xg3ekalYW0NxfafdW0FwMwyzQMiyDGflJGDx6VHd2VxYzJFdR7HeNJVG4HKuoZTx6gg11fiHxlHqDST6ZNtNxci5ls5tHtQgYBvvSDJmwWIG9ec5PNU9Y8ZT32o21xb29iFht4Y8SaXbHLLEqtxsOVyDtB6DGAOlTZc1hrbUxJdLvotXfSzbSPfJKYTBEN7FwcbRtzk59KhMk8MclqzyRoXBkhJIBZcgZHqMn6ZNdU2sJ4n+IqXrzrptn9raUXEPkWU0URbJbeMbnA9SzE9M1zF/5J1K5+yzSTwec/lyyfedcnDH3I5qE3ZXH3K9FFFMAooooAKKKKACiiigAooooAfNNLczvNcSPLLIxZ5HYszE9SSepplFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABSoVEimQFkyNwU4JHsecUlKiGSRUXALEAbmAH4k8CmI1PEOnW2nX0H2DzhbXVrFcxrOwZ0DrkqWAAbBzzgfSqmn6Zd6pO0VlGrsiGR2eRUVFHVmZiAo6ck9xWp4puNj2OmQXMckFnaRB47eUPCJioMhBU7WOeCwzkjqcVH4b8Ry+Hp7ookrR3cBhkME5hlXnIZHAO0ggdjRG13fbX/AIAp8yjpvoXNC8MxzeIZdH16C5hnMDSxvBOgUYjLg/dYODgYII/Gsmz0O/vrB72FIUtkfyzLPcxwqWxnaC7DJxzgZrY0/wAWW1n4gk1W5ttSv5fKMUf2nUg7KrKVbcxi+brx0x703QvFdtoK3UcNld3FtOW/0O4u0e3ZSBjzEMXzEED5htPbir91/wBeZleotUu3/BM228N6reaeL23tg0JV3UGVA7qn3mVCdzAdyAeh9Ky66hPGs3/CP2+mv/aFubaN442sNQMEbKxyN6bW3YJPcZHHvXL1MuW+hpFy15jd1Tw7JaQaSlpa3Mt1exMxCSRzpKwbH7ryiTj1zzmp/F3hyPw1LDaC0vxJtQteTnEUxKAsEXYMYJx949Kh1rXbDU9G0+xttOubdrBGSKSS7WQMrMWOQI15yeoI/GqniLWf7f1uXUPI+z+Yka+Xv3Y2oF64HXGaqXLrbv8AgRDnuubs/vIdH0yTWdXgsYnWMyklpG6RoAWZj7BQT+FXbTQo9Xm1GTS51itbZC8Qu541dxkAbssuMg5z0HSofDd/b6br0M18G+yukkExUZKpIjRswHcgMTj2pbadNE1K9tpwl7BJG1vI1tMAHXIIZHwR1API9sUQ5eb3trP7/wCrGkr208jNmiaCZ4nKFkOCUcOv4EEg/UVqWnhXV73TPt9tbxNEUeRENzEs0qJncyRFg7qNrZKqR8rehxXt7rTYo79ZdNeczR7bVnuSDbNnO44ADnHGCAOa6KDx/cJ4Pg0R5NYgNtBJBEdP1Y28EisS372HYwc5YgkFcjAPTNZvbTcpb6mU/g7W49FbVZLaFbZIEuGVruETLE7BVcw7vMCksMHbg5B6VXn8N6rbNdi4t1i+xXi2VwzzIFjmbdhSd2MfI3zdBjk11kfirTNW8N+IHms1s9Vl0m2t2mku8rcGKWBQI49owSqbmGW+7kbRmorv4h6fNK81v4cxLc6vDq159ovPNSZ035jC7BtQ7z1yRzktxh6X/ruv0uH2b9f+B/mc9c6DNoVxaT67brc2E7MA2nahDIJCuMqJU8xVYblJBBOCOOaua14SePx1qeh6CDJFaMxD3dxHHsjABLPI21B1xk47etX/ABJ48tvE8em22pWWqz2tlPPMzXGr+dcSCQL8okaLChSnACkYPryWXnjTT7jxtN4htLHWdPe4VvNS01hEcscDh/I+5gYKkHPr2qVfS/n/AMAbt0MbTtAM2sXFtqE0aW9jE093LbTJMBGuOEZSVYkkKMEjLCl0iDw9PHI2sXN1bN54CLGd37rY5yTsPIYRj8Tx3GjFrmn6t4k1TdaQaRaata/ZUVAqpAw2FHbaqqMvGNxVVHzEgDpXKupR2RsEqcHaQR+Y4NZ1IOpHlu16Di1F33/4YStiW30AaCJIbu5OpeTGfKI+TzDI4cfd6BAhHPUnr2pQ6tqNvYSWNvqF1FaSZ326TMsb565UHBqpSlCU3q7WfR7+un9dwTS8zV1PTILbT9O1GyeSS0vEKsHI3RzJgSJkduQwOOjDuDSa9pcWm3kLWUjy2N5CtxavIBu2HI2tjjcrBlOO6571Z1WeGHw/pWi208c8iu93cOjgoskgUBN3ThUXJ6ZYjtTfEt1bltP0yzmS4h0y28gzIcrJIWZ3KnuoZyAe4XPetn+pKKvh/TU1jxFYadNIYo7mdY3deqqTyR74qpeNbNeSGwilit8/Ik0okYD3YKoP5CtXwhqEen+KLNrufyrKaQQ3YY/I8TH5lcd19QfSsu9tXsryS3kaJmjOC0Myyofoykg/gaA7kFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABWlBoF9c2sFxbqskcyliVb/VgOE+b8SOmeOfWs2tfTfEt7pdvbw26QskEzTDepO7K4KnBHy98eta0/Z3/ebET5re6LL4ceCItcalYREmURo7vmQxkg4O3AyRxuIzkU2ewgTw5Z3KG3Ly3DJJOryZX5VOxlKgcZzlc5zVK6v5ruCCKYLiDdtIHJ3MWOfxNWn1lX0VdN/s20VFbeJQZd+8gAt9/GSAOMY9qacOV97L9L/r/VxWldFvUvDkUN3ZW2m38N3PdRw7YQHDFnGcglAAufU59araz4dvdDjhkusNHMWVW8uSPkYyMSKp7jnGPek/t6f/Q5Ft4Eu7PYI7ob95VfugjdtI7fd7VVvryK8dWisLazIyW+zmTDZ9d7Nj8MU5um0+Xv+H9b/gKPPpcNP06fU5mitntkZV3E3N1FAuPZpGUE+3WtGzi07R7yeDxFbJeHEZjNpdJKq/vFLfNG+05QMMZ6kdOtZ2n6pqGkzNNpV9c2UrLtZ7aZo2I64JUjjim32oXmp3RudSu57ucgAy3EpkYgdBknNctSHPHlu16aG0XZ3NFLay1Gw1VrC3Mc1tJ9phBYkm3zhlIzjK5U5643U618LXF1psN2l7ZK89vLcRWzO3mukRbf0XA+4SMkZ7c5Az9K1A6XqcN2IxKqEiSJjgSIRhkPsQSPxq1F4guLeS3NvFEEtraa1iV8sdkpfOTkZI8w4PHQcVyVI4iLapPz19Hp99vvZrFwes/61/4f8B8t1oTaCIYtPmXUfJjUzlzt8wSOXbG7oUKDp1B6d8y2tZ725jt7OCS4nkO1IokLMx9AByaiorqp01C+rd3fV3MpSvY39W8OX/hW+tZdU0uaa2kjif8A0u3lijdmjDNHkEHKkkHBByvbpV+bRNOHxRk0pI7eGyW7VEt55ZVSQEjEe9VdhnOMnp61gzau11qUF5e2lvciGGOHyH3qjrHGEXO1g2cKDwRz7cVoy+LjN4nTXX0XTftSsJNoM+wyAghyPNzkY6Zx7V0QcU033M5Xa07Edr4bbUJNQl+22OnW9pcrAxuZHIDOW2hdqlm+4e3v0yRfsPhxrmoS3UcSorW109pxHLIryr1G5EYKOR8zlRz14OMm78QSXC3SQ2NraR3VxHcukPmEB0D4xvdjzvOefTGKtT+LZr1rn+1NMsL9J7qS7VJvNUQPJ9/YUkU4OBwSen1pR5VGz/rb/gjle+hgOjRyMjjDKSCPQ1vXPg3WrXw3FrEum36xtI4dWtHAjjVUIkLf3W3kA9PlPJ7YFWn1CWTSINOKp5MM8k6sAdxZ1RSDzjGEHb1qOhXXyK8RRZkMi7kDAsvqPStXWp9Eu5Yl0Kzksx5su8zOTlC+Yxyx6LgH+vWsilVtrhsA4OcEcGs5U+aSnd6eenzXUfM1FruWNQs/7P1Ca0+02915TbfOtn3xv7q3cVWqzqF5/aGoTXf2a3tfNbd5NtHsjT2VewqtTp83IubfqOVuZ22NjRbrQreBhrWnzXUnnBlaNyP3exwV4Yc7yh/A/Q49FFKNNRk5Xevnp8uwnK6S7G/c+DdatfDcWsS6bfrG0jh1a0cCONVQiQt/dbeQD0+U8nthwRrLOkckyQKxwZJAxVfc7QT+QNTvqEsmkQacVTyYZ5J1YA7izqikHnGMIO3rVWteouh0evadptlqdvp9vLYoqhfNnBuC/wBwEl8gjkk42Lx3qveaJ53iPUbSA21jFa7pGDyu6RoCBw23c3X0yapXGptd6sb67toJiQA0TbwhwoUdGB7Z61YvfEEt5eXVyLO1gku4jFN5W/DZIOfmY4PA6ce1dEpU3d+v5aGKUlZCweHnuJLnyr+0e3tollkuUEjptb2VCwxznKjGOe1SWOiWd1ot5eS6rbwyQSoi7ll2gHdycRk844x75xVHS9S/sy4E62kM8qkNG8jyqYyO4KOv65qaHXJVlvWuba3ukvn8yaKUMq7gSQRsZSOp796lOnp8+/yG1P8AIzCMEgHPuO9b9z4N1q18NxaxLpt+sbSOHVrRwI41VCJC391t5APT5Tye2ATkkgY9h2q0+oSyaRBpxVPJhnknVgDuLOqKQecYwg7etYdDXqV4iizIZF3IGBZfUelb1zBpevarZ2PhiyktJJp5VJndiCpcmMdWPypwcDJ9z15+pbaZILlJJbeO5RTzFKWCt9dpB/IisatNy96Ld1e3b5rRP5lRlZNdy9Pobxz30UV3BP8AYYfNmKrImPnVCuHRTuBYcEDvzWlD4YjTSr77fdWltNGbORLiV32Ik0bvtwqkkn5OinGD2yagl8W3M94JZrK0kg+xiy+yuZWQxBtwG4vv4YAj5uMAdOKdL4uluZrl7zS9OuI7gQZgZZERPJQom0I4PQngkiuGX1yUbW7dVfdeivv5bbm69krsdbxaTod3c2HiXT5Lq6gucFoZDtKBHBAIYdWMbA46A/Q5EWn+bpFxf/a7VPIkSP7O8uJpN2fmVccgY5PbIpl/fT6lqE97dsGmncu5AwMn0HYe1aFvqOm2/hK8sWtRPqF1NGyzPAo+zKpJOx8ljuzgjAHHU120qcopyk/edr66X62XQxnJN2Wyv/TMeiiityAooooAKKKKAP/Z)This function is called only when an arithmetic expression is on the RHS of the assign operator.  
For a parameter, it takes the expression in the postfix form.

**Ex: int z = 2 \* ( 2 + x ) + 7 🡪   
 int z = 2 2 x + \* 7 +  
Note: elements MUST be separated by spaces.**

First, we store the elements of the postfix expression in an array.  
Then we loop on the array entries.

1. if the element is an arithmetic operator (+, -, \*, /, %) we print the suitable bytecode for it for example: iadd, fsub, imul .. etc.
2. if the element is a digit, pass it to the method (handleNum) which will also print its bytecode ex: iconst\_2
3. Lastly, if the element is a variable, we send it to the method (numOrVariable) to get its index in the symbol table, then print the bytecode.   
   ex: iload\_1

Now, after we processed the postfix expression we need to know where to store it.   
we have two possibilities; either store it in a previously declared variable or store it in a new variable ex: **x = 2+1** or **int x = 2+1**

If the variable was declared before we send it to the method (numOrVariable) to get its index, then print the bytecode. Ex: istore\_3. Else we declare it then repeat the same steps.

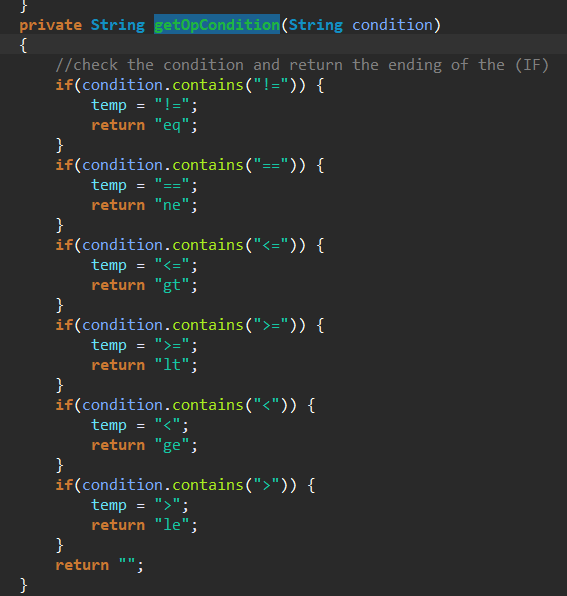
**3) If Condition, else:**

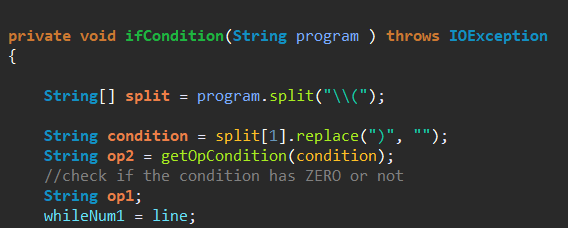
There are two variables used

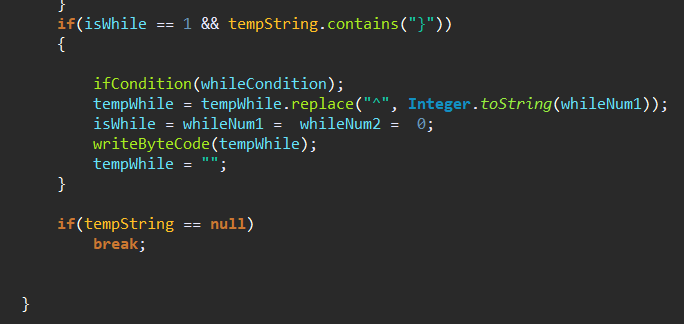
1. Int **dontWrite** 2) String **writeTemp**

**dontWrite** will be set to 1 when the program starts an if condition and is set to 0 when the if conditions finishes (when it finds ‘}’ )  
**writeTemp** is used to store the bytecode of the if till it finishes , this is used to ensure back tracing where we set the number that should point to the end of the if with (~) then replace it when we finish reading the if condition.  
If there is an **else** the bytecode go to ~ also has the (~) symbol till we reach the   
end of this condition.  
The following figure shows the function that handles the if , in bytecode the standard if is used in two ways; either to compare with zero Or compare with number/variable.





****The bytecode mnemonics are similar but work differently, So the code first checks if the condition is compared to a zero then the (if) is the start of the mnemonic else the start is (if\_icmp).  
Then var1 is always a variable so we get the variable’s index and load it, then if we compare with something other than zero so we need to get the variable or number as we did in previously.  
This gets the ending of the bytecode mnemonic   
Ex: ifeq, if\_icmpeq, Ifne, if\_icmpne

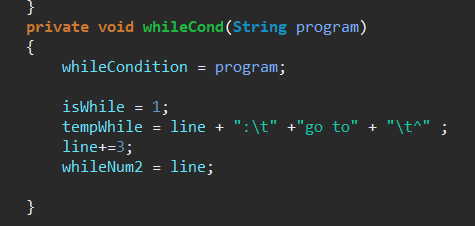


**Handling the back patching in if condition:**

When dontWrite is equal to 1 it means that there was an if condition or else so we need to check first the next line to be read if there is an (else) so the (~) should be replaced by the line number after the (go to ) statement

Which is: t=line+3  
Else it is replaced by the current line that will be written.

**3)While:**



Three variables are used for the while:

**String tempWhile; 🡪 used to store the bytecode that is inside the while loop till it reaches the ( } ) character.**

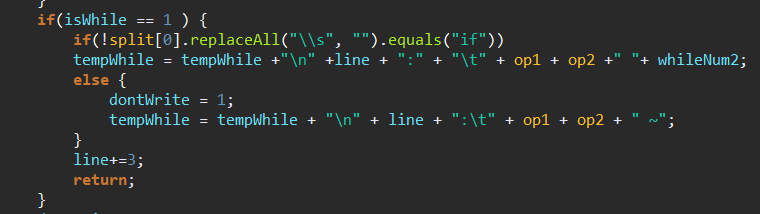
**Int isWhile; 🡪** used as a flag to help in writing the bytecode in the **tempWhile**   
string other than the file.

**Int whileNum1, whileNum2; 🡪**Two numbers are used in the back tracing both will be substituted at the **end.**

**Back patching in while:**

The int whileNum1 is going to be the line before writing the if condition of the while loop i.e.: in bytecode the while loop’s bytecode ends with its condition.

Ex:  
While(x != 0) 🡪 the (x != 0) will be considered an if statement and the number it follows is the **beginning** of the while loop.—whileNum2 --

****

**handleboolean( ):**

![A close up of text on a black background

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDgRXhpZgAATU0AKgAAAAgABAE7AAIAAAAHAAAISodpAAQAAAABAAAIUpydAAEAAAAOAAAQyuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEphcnZpcwAAAAWQAwACAAAAFAAAEKCQBAACAAAAFAAAELSSkQACAAAAAzIxAACSkgACAAAAAzIxAADqHAAHAAAIDAAACJQAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA2OjA0IDIyOjAyOjQwADIwMjA6MDY6MDQgMjI6MDI6NDAAAABKAGEAcgB2AGkAcwAAAP/hCxlodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIwLTA2LTA0VDIyOjAyOjQwLjIxMDwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KYXJ2aXM8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgA1wF4AwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A8NALEADJPAA71fn0LV7XyvtWl3sPnSeXH5lu673/ALoyOT7VUtv+PqL/AHx/OvR/FHiOx0nxVqEGbu5lk1S3uLgugCxLFghU+Y7ic9Tt9K2jGLSbf9aHPOclK0UcImham1zbRSadeIbpiIv9Gcl8fe2jHzY74p2qaLLY6hfQ2q3Fzb2TASXDWrxbQehZW5TJ45qe71ganr00t9eXiafJdvcLGqhymTxiMsFzgAdeB9K2bvxRpU3i/UL9Devp2rQvFdxPCqugI4K/OQxDBTk4pJJpDcpJ/wBd/wDI5y30DWLsgWuk30xMayDy7Z2yjZw3A6HBwe+Kt2PhHW9R0u6vrXT7h47ZghQQuWkJYghQF52kc+lbVr4u0k6pf3l5ZuJGli+xP9ljnMUEfAj2ucISAvzDJHNQTeI9LvrrxIl19sgt9XmSWKSOFZHj2uWwylwOQezU7RJ5qnbt/wAE52PSdRlspLyKwuntYiRJOsLFEI65bGBVaKKSaVIoUaSR2CqiDJYnoAO5rr7fxhDD4ds7O3nlsbmzglgDJp0E4mVyT99yGjzkggZ9a49WKMGQlWU5BHY0mop+RpFyad0WP7Ovczj7HcZtmCTjym/dMTgBuODnjB71YOgarHqFvZ3OmXsE05+SN7Z97AdSq4yce1dO/jqzTULC9t7SUytdR3epKwCiSRECjZyeM7257tWfeazpEtnaabDPqL2sd5JeS3M8CGUFgAFVPMwRwMksMkk47VSjG+/9af8AB+7zM+ab6W/p/wBfMy73Q54/EE+laZHdX8kTEKFtHSRwBknyz8w/Gl8R6E/h7VEspZWkcwRytuj2FSyglSMnpnFdDeeKdFuta12dWv0g1mAI0n2ZPMgIZTgDzMMpC88j6Vh+K9Xtda1iO5sEmSFLaKECYDd8iBexx2qWkoq2/wDw/wDwBxlNy12t/l/wRlv4bvr7Q4tQ063uLwtNLHJFBAz+WsaxneSM8HzMdOMe9VU0XVJdMbUYtNvHsVzuulgYxDBwcvjHX3rZ0HxNDpMeiRy/aSlhqjXs6x4w6lYwMDIyw2t1x168mr2k+KNE03Q2hFtKl3JaXMEu2yhcyPIHCv57HzFABUFFAHGcnkFtRs2n0/Q0Tf8AXqzmJdF1SDTxfT6beR2Z24uHgYR/MAR8xGOQQR9avt4XvLbw5/bOqQ3VlAbmKKMSWpHmo6sxdCxAbAXp3yORV5/Fdu63oZLiRZdMtLOJHwVDRGIsDzwpKPjH97pyam13xDoupWmoR276l5mpalHezPNEmIVAcFFAf5iN/BJXPTC45bUUnb+tf1X3CTfX+tP8zH1jQvsOq2tnpkk+ofa4IpoB9n2SN5i5C7Azc89iaLbwzevd3dvqZXR2s4BcTHUIpU2qWVR8qozclx2rdPibQ7XX9Ov7Nr24SGx+wzLcWUQ2r5Rj8xQZHVjznYwx2zzmlg8XwQ38+NX1GGJrD7Lb3NlpkNrJbkzLIQI4pFGDhudwPzdKOWN36v8AW36f8OF3ZfL/AIJgXHhfVo9Zm0yztJNRniRZT9hjeUFGUMrYAyAQw6gHnmqtro2qXyztZabeXC23+vMMDOIuv3sD5eh6+ldJeeJtJ1aO8tL17+2hlmgmW7ggR5p3jjKFpV3qMsSWzuOD/ezmp5PGWmahfQXt6uoWkllqEl7BHbBXE+7acOxZdrfIBuAbg9OOVyxvv/X9feF5W2Odg0i2uPC91qkd3L9otJY0lt2gAQhy2CH35P3eQVH1qo+kalHpiajJp90li5wt00DCJj0wHxg9D3rbtdU0U+HdVtrue+iu9QmSbZDZo8cZQuQu4ygkHd12jHvVrU/Ftve6L5VtLJbTSWkNrPbLplviRUCjH2nPmYOwHBBweM4GaVk1d6PQet7dDn7jw/rNobcXek30BumCQCS2dfNY9AuR8x5HSmXGjanZzW8N5p11byXWPIWaFkMueBtyOeo6V2kvjXQYfsqadbXEcMOq216I0sIIfLij3ZTcjbpG54Zzz7d8Wy8UQxf2G1z9ollsNWkvp2Y53qzRHg5yW+Rs59RVOMb6P+tP+D9wryt/Xn/wPvM280T7Nq1xYx3cUhtEzczEEJGwwGAxksAxxkDn6c1Bb6Rc3jzixH2lIV3GSJHKt7DIzn2IHSrd7bHRvEU6vezRrkyQXVsofzkblWHzDgg5/QjrTDqNodQmYRtHBNb+SzRxqGJwPn2AgDJHQGua8uh3QjSsubv36f15fMpJp19LI6R2dw7ocMqxMSp9CMcUq2LnTZbuQSoEYKn7lir+vzdBj0pzXaR2DW1u8pxcCVXI25AGBwCcGpba5sxpt1FczXHnXBUkrEGAIJPUsCc59PzptyJjCne3k+vrYqNZXSW/nvbTLDx+8MZC89OenenSWF5FbieW0nSEgESNGQpz05xirh1ON1lQ+Zh7OO3XPQFSpPfpwfzrT8QQFbW5ba0I89SxeEqJzyAVYud2Bk8Ko/Spc2mkzSOHhKEpRd7L/P8Ay/rY5yCCa5lEVtE80hBISNSxOBk8D2qdtI1Jbz7I2n3QucBvJMDb8HgHbjPervhZgmtlmkkiC2twTJGMsv7l+QMjn8R9asSa7axW/wBltDctFHp72scrqFd2d9xyAxwvJGMn9a7FCHJzN9/1POcpc1kZiaNqcl5JaR6bdtcxjc8KwMXUepXGR1H50210jUr7zPsOn3Vz5Z2v5MLPtPocDirtlqdvJpUlhqk93GvmxypNAokb5QVCEMy8AHjnj05rrNLmOq2638VtLum1GWSKVLdrj7ISqDe5DoF9csGBwTgd9KdGE3o/60/rzIlUlHc4ZNI1KSCSaPT7poogTJIsDFUAznJxxjB/I0NpOopax3L2F0sEpAjlMLBXJ6YOMHNWLzUWWzsbW2mkD2YlUyI2FYs55UjsR9K2bfxHpNrpnkW8EqM0UCsi2sQwyOjOTLne+7aTg4A449IhClLd22/r9CpSmtkc9NpWoWsImvLG6ghyAZJIGUc9OTxUutaUdIvxCJluIJY1mt7hV2iWNhlWx2PYjsQR2rX1bxJBqmny2sKXLSSk7QwB5M7yep7MB9RUHiplt10rSdyvPpln5NwykHEjO0jJkf3d+0+4NZVFFW5X/Wv/AAPvLg273KWg+H9Q8R6h9k02EswBLyFWKR8E/MQDjOMD3q5a+D9SuNMv5jbXSXtpJEgsfsrGSTeCc46jAXPQ8VW8MarDoniO1v7pJHhiLB1jxuwylcjPGeav2Ou6fpWi6jp1nLeSi5uLeVJWiWMlYySwYBz3xjk9O1VFQa1M5uab5THg0bVLpyltpt3Myu0ZWOBmIZeq8DqO4psWk6jNYvew6fdSWkZIedIWMa465bGBXSa54xivLa+XSjdWstxqxvkfhCqbAAMqchtwzxxwOafa+LrCO3sLqcXrahY2U1qIAFMMxfd87MWyD85JG05IHNTaNv67f56BzT7HKtp96lzLbvaTrPCpaWIxENGAMksMZAA9afdaTqVjbR3F7p91bwS48uWaFkV8jIwSMHjmutvvGWjXNpfNDYSpf3VoI/tBiTJkZQsmTnO3CjHvngZrP8S6/pms6ZF+7kutWEmZNQe1S2Z0x91lR2Dnp82AcAdacoxWzCM5tq6OahRZJVR5UiB6u4OB+QJ/SrsmkPHeSwG6tyIFJml+fbHzjByuSc46A9apQiIyqJ3dI+7IgYj8CR/OtWfULGW8vcNcfZ7wZZvKUNGwbIwN2GHbqOtYSbvod1KMHF839f07Ff8Ash1aQy3VvHEiK4lO8q6t0IwpP5gUVbi1iCMPFFPd2qLCkUc0SjeQrEkkbhjJJ4yaKm8v6/4Y35KNtLf1/wBvIxKKKK1OAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKANDT9JN/azXL3lraQwuiM9wzcls4wFUk/dP/wCrNWR4amRpRe31lZeVcm2JndsFwAeNqnjB6nj1xTdM1O2sdFu4p7aC7lkuIXSGcPtwqyZb5WHTcBgnv0qreavdX8MiXJVjJcNcM+MEswAPtjjpiuh+zUe7/wCG/wCCZe+5eRZj8PXDwKxubVJ5I2mitmdt8qLnLAgFf4TgFgTjjtlz+HJY9NlupL21VooEne3/AHm8K+Nv8G3J3D+LvzTIvEE8VrHH9mtnnhiaGK6ZW8yNDnKjnaepGSpIz16VtaprGm3Wgm2+1rLEltELeBXuBIkoVQSynEIH3vujP4kmq5aTi2un/B/H8BXmpJGNe6A1i5ik1GyedZFjeGNnLJu6H7vI9duSM9Ktz+C9Qt5o1mmhjjeOSXzZUljACY3ZV0DdGB4HPbnisw6vcHXV1YLGLhZlmA2/LuB9D24q5J4nuDB5EFlZ28WyVdkav/y1C7jlmJJ+UYyf6URdDW4fvNCDWtCuNDmSO5mglLFlzCxIUqcEHIFRadpFzqgkNtJZp5eM/ab6G3zn08x1z+FO1bWbjWJA9ykSESSSfuwRy5yepNN07W9V0gSDSdTvLESY3i2uHj346Z2kZ6msJct/dNI81tStc272tzJBKY2eM4JilWRT9GUkH6g1pQeHZ7iyhnS7tBJPC80VsWbzHVCwb+HA+6epGe1Ztzcz3lzJcXk0k88h3PLK5ZmPqSeTWw+ux22lWMVlBA11HaPC9ywfzIt0j5Vedv3W64J+Y8+lU1HlbmKd7rlK76DJHbRub6zM8sSTR2u9vMdWxjHy7c89M54qR/DN15ixW9za3MwnS2liidswyMcAMSADyCMqSOOtZ9xqE1xNBKdqPbxpGhTjAQYB+tbFn4jSXV7Z7y3t7SB7tJ7uW3jYtKVOdxDEgcknCgDnp0rSPspSs9Ff8L/1f8CJc6VyE+F5We1W31GxnF08iIymRQpQZbO5BgVFBoDXV/Fa2d/a3JljLq8CTSYwcFSoj3g9/u4x3rT1jXYTLa3cNxDd38ZkQvHJcvGImXAB847t2Sx4wPrWHpuptprTgW8NxHcReVLFNuwy5DdVII5UdDQ/ZqVn/Wn+f3B77V/63NVfBeofaJ4Zbi1gaFtp81nXd+78zgbcj5MnkDGMHB4rF1CyfTr+W0ldHaM4LJna3GQRkA9/StV/Ft87u3kWq7/4VQgD9yYeBn+6fz/Kqx12R31B5rGymkvohGXliLGHGPmj5+VuOvPepqeyt7hUOe/vFy18JNPoltqVxrOlWQu0la2guZZFkl8skMMhCqnIwNzKDkDPXF65+GuvWnhb+3ZkVYBAly8ZhmUrG+NreYYxEx+ZTtVywz0yCBz13qk95pdhYyrGIrBXWIqDuO9txzz6ntir+oeJv7VsYor/AEqwkvI4o4RqQ84TlEwFyBJ5ZIUBclMkD15rJavU06lzWfBVz4dS6uJb7S9T/s26S3vba2klPlM2doYlVyDtI+RiR0ODU+v6Da3ninSLLRrWHTRqVhbTeVGJ5kWSRNxwB5khyegG41J4v8Z2+pa1qkOk6dYJptzqRupXjE4a/Cs2wyFnyowxOE2ct04GIZfiBM2rWOoQaDpNvLZ2xtAsf2grLAYzH5bbpScbSeVIb3qFdpX7/p/mH+X6/wCQl/8ADrV9M1kWN7NbwRiyN9JdzJNFHFCGKlmR4xKPmG3GzJJGAQc03RPAF/4iur1NGvbe8tbPYHvLe2upUZnBIUIkJk7NklABjryMo/j28a6hZdL0xLOKwbTjYLHJ5MkBcvtYl9+dxzuDBsgHPXNW28VLbC9txoWmSabeNHI2nSG4MUciAhXVvN8wHDNn58HceOmGv6+//L8Q/r+vn+Bq6X4E/wBJ1Ox17zoL2O4bT7IQuux7sI7YJIOV+VVwMHMin2qjY2thd/DvV7iTTYVvrC4t1jvFeXzGEhfcrKX2fwjGFBpLbx/r2mWtta6FdPo9rbzPMILCeWNZWZgfny5LgABRk9B3OSXL40UabqdkfDmjlNTm86ds3IIYMzJtxMAAu84GPTOaTvb+vL89fyHp/X9eg29tbCX4b2OpQ6dDbXq6hJaSTxSSkzKsSMCwZyoOWP3QB7VU1Sys9Jt9Mt2j826liS7upNx4WQBkjABx9zBJ65bHGOZZPFKSeE00H+wtMWJHMq3Ia483zSoUycy7ckKONu30FV9ZvrbVLHT7lX2XsMC2txFtPzCMBUkB6crhSOuVz34Jat/L8v8AP+txLZJ9n+f+RJqcug315bx6PAdNi86UySXLOy7C5MYO0ueFwDgfn1rTg8PWN18SG0u4a3sbVbhR9nWWWQOvB2K+zPI7ttrlraZILlJJbeO5RTzFKWCt9dpB/Iite48UzzeJIdbjsLO3u4n3kR+YVkPTJDOe3pivOq0ayXJSb+GWt+r1W/8AS0t1N1OL1kluiUXXh+HVLj7bYW9xBtiEP9nNOI8iRS5/esH5TcvPfGMdaw7toHvJntIzHA0jGJGOSq54H5VFWvpGoabYaVqi3lr9ru7qDyLdXhUrCSQfNDk5VhggADnPXseynRVO7u3p1d/6uZynzaWRkVsS3WhNoIhi0+ZdR8mNTOXO3zBI5dsbuhQoOnUHp3x6KqdNTtdtW10dvvJjLlubOqXegy2KLpenSwXIkjLO7kqVEShx949ZAx+h69guvabbQ3llc6aPJsdTgWeFZHyITuKOhY9Qrqwz1xjNYygMwBYKCcZPQVu6rqOn3Wp6faRSy/2XpsK26TCAM0nzFnfyyw+87MQCRxjNOlTVOKjdvXq7/wBdAlJv7jK1Ky/s7Up7P7Tb3fkuV8+1k3xv7q3cVWrR8Qaha6r4gu73T7KOwtpnzHbxqFVBgDoOBnGcD1rOqle2oPcKKKKYgooooAKKKKACiiigAooooAKKKKAOj8E2cF9rUkUpiM32eUxJcWgnibCMTn51wRjgjPNXPCWnWZ8Pa1qct1p63NvFGIvtcDyrb7pACzL5bKcjgYDEe1YGka5f6HM8umPDHI42l3t45CBgggF1OMgnOOvemDWL1Yb6KOSOOK/2/aI44URW2tuGABhef7uK05kvuMZQk2+11/wSpK5kmdztJZiTsUKv4AAYHtitm8gt7DwtpqpGj3WplriSZlyY41do1RfTJViSOvyjtziVqyapDdeHbaxukf7RYyH7NKoBBiY5ZG+jcgj+8wPapja6TNi7ceF7dLqWC01Jp3t71LSctb7ApckBl+Y7sEHIOPbPWoBodjNdNDa6o7/ZxI10XtduxEGSyDcd2eQAdp9cUmr+JLq+1OWa2ZYYBdG4hRYI0Oc5Vn2j5mA7nPf1rNt7+5tb77XBJtmySW2ghs9QQeCDk8EYrZypX0X9aefr/W2KU7av+vuNm18MR3syNZ3VxPbSWzTr5dpunba+wqIw2CcnP3unPtSXPh6xtLi+E+pTCGy8oORaAuWcH5du/AIxg5Pr6cmm+Ih51ydVY/vLcQwmK0ikSLDhseSdqEHB+hOetU9W1WO5nmTT0ENtKsYkAhSPzWQff2rwmSTwvH1qpeyUU0v618/T/g6iXtLtN/1p/wAEvaV4Yg1aWRYNQYIZzDbzNGiJMcccPIrZ5GQqsRnvU1t4PhnsY5n1NklkjRxGLfIBcOVGdw/55tnjpjr0rI0/X9S0uFY7KdUVJDIhaFHKMQASpYErkAZx1oj8QanHGiJc4VAqqPLXgKGC9u29vzo5qHL8Ov8AXmPlqXepnAZOBXW3Hgu2TxJB4atdVll1s3CwXCvaBLaI4y5Eu8s23p/qxnBx2zz0mrXsujwaVJNmyglaaOLYo2uwAJzjJ6Dqav3XjHW7x7aWe5iNzbOkkd4tpElzuQYUtOFEjYGPvMeg9K5v6/r+vuNehr2XgrS9Ve2n0zX5Tp8jXKTXFzYeW8LQwmbOxZG3KVHXOevy+t/QvB3h1vE+mRX+o3l5p2padLeW/wDoQjclRKpDgTfLgxFhhmzwDjJrmrrxlrl3Mkj3MMWxJUWO2tIYI/3qFJDsRQpZlOC2M9OeBVaDxHqttdabcQ3W2XS4/LtD5any13MxUjGGBLtndnIOOnFL+vz/AOAVp/Xr/kbGheFNL1+/vBbapfR6fbiMC7ntbaH5mz8rCS6VQeDgB2JweBirdj4fg0xvGWmXE0E+oabbzJ+9sRLGVSVFLxyGQGN89Plbgn1rHtvGut2c1zJaSWcP2kxtJGmnW4jDJnY6x+XtRhk4ZQDz1p9r45120udQuI5bOSbUnd7uS4022maUsQWBLxn5SQDtHGe1D2suzErX+aL1h4Ksb3RLW4bWpI9QvNOub+K0FnuQLAZMhpN4xuERxhTz1xwTVvfCsFr4Qg1m3vLm9kkRWmFtbJJb2xY4CSyiUsj+gaMZOcEgZrOTxJqsTwvFcqhhtpbWMLCgCxSly6gYxz5j+4zxjAw5/E2pNoraUptIbV0WOTyLGCKSVVIIDyKgdxkA/MTkgE0PXb+tX+lgVv6+X/BJ9ajt9Ki0uxggjeRbeK8uZWQFpHlUOFyf4QpUY9dx+mlp9/YeIPE1nt0a0sraCS4nmKqpRUYlgXGFBWPjg9QMY5xWJqmpxapp9gZUdb61iFs7gDbLEv3D6hgPl9CAvvmnY39zpt0LizcJJtZDuRXVlIwQVYEEEHoRXLiaHtYtx+LW2r6/8D1saQny2XTS/wAjvz4dKeLpTPa2VqhsVRLyaKL7KZ8KgmEf3djMSF+Xvu28HGHqVxB4e8VaktzoEXlXDpJDbXCoDColV+mGC7gpXb2Ddx1zn8XaxIV8yW2ZFj8oRmygMezIYLs2bSARkDHBzjGTVHU9VvNYuhc6hIskwUJvWJUyB0ztAzjpz2AHQCuDD4PEKf79pxtbRvpa39fdu77zq02ny3ve5raMttrlzq1i1nDE11FLdWrKoBgeNWk2A/3SoZSOn3T2qHTbeDUvC+qQmGNbrT1W8inVcMyFljdGPcfMrD0w3rVfSdUh0qxv3jSRr+4hNtE/ASKN+JG9SxX5QOmGJ9KLfVIbPw3dWVskn2u+dVuJWwFWFSGCL3JLYJJx90Dua9i1lZdv6/Q5b3d33/r9TLrXvIYrDw5aQvEhu71/tTOQC0cQyqLnqMncx9RsrIHB6Z9qvz6tLda2NSnggdldWEBU+UFXAVMZztAAGM5x3rKpGUpK2y1/yX6/IRY1uGKwtrHTREguYY/NupABuLyYITPXCrtGOzFqboGif23cziS4W2gtovNllYoMDcFAG90XOWHVh374Bz7m5lvLua5uG3yzOZHb1YnJNS6fqV1pdw01k6qzoY3V41kV1PVWVgQw4HBHUA9qh06qo8sH73fz6gzch8ILe6tcaZpmpw3V0iJLCF2lJFONwLqzKrLnkAsDg4JOAW2fhvS7tYnGtTLHdX7WVsfsWS5AQ72G/wCVcvjuenB5xl/27fq05hkjtzOyO/2eCOHlDlcbFGBkA4GASATyK0h4wvY9NAgMSX7XktzJP9kh+XckagoduUbKMSVx2Oc9OWcMatFL8u3+Ha/9a6PQjbQbG10+KXU9Ue3nmMypGlr5ihoyV+ZtwIBIAyAe/HrNeeE4rHRPtU+qQJdi3Sc2zSRDIcKQoHmGTdhgcGMDg89CcGa8nntoIJZN0cG7y1wPl3HJ56nn1q1Nrd7c6cllcNBLFGgjR3tozKqg8KJNu/A6Yz046Vq6eKump9ddtr9NO3/Dhpcvan4dhsYbOSC8knS4dEa68lfsyEjJAlV2yR3UqpxzgU3VtEtNH1G2V7m8ktJCT9q+yIUkA7xFZSsg9fmGOnWqs+v31xbxwP8AZUhSRZfLis4Y1dlzgsFUB8ZP3s9T60TeIL+4lt3k+y7bcs0cS2UKxAsACTGE2knA5IPQelKMMWrc0l1v+nQWljW1bRIpfE2tPczRWlnYkPK1pa4+8QqhIt2BksOC2Bzz2pn/AAi9jFHPc3WrSJZr9nMLx2m55RMHIypcBSNhyNxHXBPGaUvirVptQa9kltzPIhjlxZwhZVPZ1CbX6D7wOMD0qrc61qF4JhcXG4TPG7rsUAGMEIAAMKAGIAGB7cVEKOLUVFyS0W3yvvH1+/bqN21Gatp7aVrN5p7yCRrWd4S4GA20kZx+Fb6aHZajoel7bn7PenTricRpb5EvlyTMS75GCVXA4b7vOBjPN3l3Pf3013dv5k87mSR8AbmJyTgcVPFq99B5PlT7fIgkt4/kU7Y33bl6d97c9efpW9SnWlTjyytJb/c127hdX8jWfwoB4Zk1RbtlmigS4e2lWJSUZlUEASl8fMCCyKCO/TNbWdBi0uxt7i3uZrxZMBp0gX7PuK5KrIrtlh/dIU45IFRS+JtWm01rGS4QwPEkL4gjDuikFVZwu442jGTxUV5rd7e2YtJTbxwBw5S3tYoQzAEAtsUbiAT1z1PrWdOGMUk5yVrv7tLdPUNLEWlXkWn6tbXdxax3kUMgd7eUDbIB/Ccgjn6V03hwQa5rG5LKxsVt7BbdZ540aFZiQqyOrDDFiSOQx5zzjNcdVvT9UutMaU2jR7Zl2SRywpKjjIIyrgg4IB6cVpicO6sW4aStb+v+GEd/pehRp4o1Zp9KhtEe4Q29vdwxyF0yXaBIySBIyDjHTgZGQSVyDeMNaedppLiCR22E+ZZwsMrkKwBTAYA4DDnGBnAFFeHXyzGVZKXMtl1l2SNFKPW/3tGJRRRX05mFFFFAHR+DS1veX9/BIPtVpYzvDGhIl3GNh5iHGBs+8eQf7oJrnpZZJ5nlmdpJJGLO7nJYnkknuav6Hqo0fUWnkgNxFJDJBLGH2MyOhU4bBwcHg4P0NUJTGZnMKskZY7FdtxA7AnAyffA+lD3+QLYbRRRQAUUUUAFFKiNJIqRqzuxwqqMkn0oZSrFWBDA4II6UB5iUUVbh0rULnT5r63sLqWzgOJbhIWaOM/7TAYHUdfWgCpRVuXStQg06K/nsLqOzmOIrl4WEbnngMRg9D09KqUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRU1nZXWo3kdpp9tNdXMpxHDBGXdz6BRyakbS9QTVP7MexuVv/MEX2QwsJd5/h2Yzn2xQBVopXR4pGjkVkdSVZWGCCOoIp0MEtzKIreJ5ZCCQkalicDJ4HsM0AMoqzHpt9Lam5is7h4ArMZViYrhcbjnGMDcM+mR60kmn3sVjHey2c6WkrbY7homEbnngNjBPB/Ko9pC9rj5WV6Ksz6Zf2q27XNlcQrcjdAZImUSjjlcj5uo6etOk0nUYp4oZbC6SWZzHHG0LBnYHaVAxyQeCPWhVIO1nuFmVKKOlFWIKKKKACiiigAooooAKKKKACiiigAooooAKKKKACgdRgZ9qKKAOg1T7RJZi6u4rm3SORQLG63CJuD/AKvoQB6Y4z1qS+gS58QRGfTwltKdwlXeBMNmeCSR+VZM2jX1vpcWoTxxxQTDdGHnRZHXONwjJ3EZ7gYqjWfs2jseKjLpfb8L+X5Gtpzpd6vai100Bgw3rE8hwM/fGGyCPXOKe1rHaNfyXtk0kiToI1mZ14YtycEE8D1rGqazs7i/vIrSziaaeZgqIvUmq5ddDNVko6rX5drbW+Z0Vvo9oLm6/wBENxHFdshQrK7CMdl8vvz/ABcfrVW5IPgO2IXYP7VnwvPH7uPjmo9MW/ezuEt7G3u49NJuXd3/ANVyAWGGAYZA9ahGuO2iS6bc2dtcCSdrhZ5PMEkbsACV2sFP3R1BqYxkk7+X5/8AALrVaU0uRJWvf5rr6X+4sW//ACIGof8AYSt//Rc1ZFrMkF1HLLbx3KK2TFKWCv7HaQfyIrRn1CdPDEOn/wBlw21vPKJvtYWXdcMm5erMV43kfKB2rJrW9pX9PyRx7xt/W56XrOlwat8Rl/tHRRa2NyZJbe5iSY/2iRFuRVLSBWycDCFCc4yCQafZeHNAn1po7jw/e2+PsqNb3sUtqMy3Hll1Uyu2Np7ufmHpxXneoabd6XNHFfxeU8kSTINwbKOMqeCeoNVa050nqtmRytrRnpD+HLF4Li40jwq2pTbbQpaJJO6xh/ODsdrbiPkXnIAPtweJ8RWtnZeJNQttMffaRTssRD7uAem7vjpnvVePUJYtJuNPVU8q4mjmZiDuBQOBjnp85/SmW9jd3ccklrazTpEMyNHGWCD1JHToaicluXsb1hZeF5NCEt9e7L/YxMf2yVfm5x8otGHp/wAtPxHbm1GWAPrSUA4IPpRG3Ndj6WO21HQrKG9aKXSG0+NdTjgtizyZuoyxDfePIAwcrjGQMnrWbaxaZqOsPaR6UkTwecYo453P2oqPkjbJPJI/h25zgAHFZOqpeS3A1K9iWP8AtEvOm0jDZY5wMkjnPWqNbSqLm+H8vLyMYwdtzs7XQba4vlWXTFt7s2TStYP5zKj+YFBKKTKAVOcc9j0qtfW2m2c2qyjRlAtTAkcExnjGWB3MQWD4OMjJHGPcHC07VH05bmP7PDcw3MYjlim3YYBgw5VgRyB3ovbq51e4abyAFhiVRHCh2wxrgD1OOnJPfrVSqQ5VyrX09f6/ysJQlfV/1odP4b0Sw1jdPLpv+jXF2YkEYkkNsMA/M/mKFHPBZWJPr3mstE0d9Ng83T1eWSKEmUzODudZcnAOOPLGPcnqOK4Wij20OW3Iv6+Q/Zyu/eLkmk3sWjwarJAVsriVoYpdw+Z1AJGM57jnGK9FufB1i+oeGm/4R5tN0661K2s5or+G6t7yfdjd9+Qxuhwfnj2kEjKrkZ8uq7ot9PpmvWF/ZiJri1uY5ohMcIWVgRuORgZHPI+tcy3+40e33nX+JPC7HT9NSz8LXOkazcXk0UWmIJpJri3VVKylHJbOdwyAqtg4Awa3L7Q9VT4/kS+Hry5W4vEkQmO4jKRbkDTo0TKw2/3s4B615pq2mXmlX3k6gkaSyIso8qVJFZWGQQyEggj3qlSjpJN9P6/QqdpXSPTfDVpcaX4k8WaNd+GvtWoXFlO1vbXi3InnXzFYIFV1LAqC2R8x28HrnnI0msdE8TTDTv7NvFmhtZLcB1NrE5cuoDkuOURTkk4JB61ytaGmXd7YxXc9tB51rJF5F0roWjKt0DEdDkZHIOVyOlSo2Xyt+P8ASHfX53Eg1zUbbTzYwXJS2KyKY9i9JNu/nGedi/l9a9AvtDa88GmKF5I2it7bz7p7dzFcoi5RomzjC+Ywc9cLnA+YV5vPZz20FtNOm2O6jMkJyDuUMVzx05Ujn0qCuLEYL2koum+Vp3em7v1/rfXoa06vJvqeleN9Nl/sF76FLiAW94XnWa2YGWUhU85SSQIiEUjGeWxn7tcLfa9qeozxTXl27ywyvLG6gKVd23swwBzu59u1Z9XTDcaLqNu95axOyhJ1hm+ZHUjcuQD0I7ZqsHg/q8EpPms9Hba/T8+oVa3O9NL9L7/1c6PVbRLn4kWif2ct9LfC2muLATeSJJZI1Z03/wAOWY89s1y19C1vqNzA8P2do5WQwlt3lkEjbnvjpmrMeuahHrUmrecr30jtI00sKP8AMTncAwIBz0IHHbFQw2l5qZup4le4eGM3E7FsttyNzc8nk5PX1NdnYx/4BVooq5a6Vd3ljdXsCRi3tcebJJMkYBIJCjcRuY7T8oyeOlMCnRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABSowV1ZlDgHJVs4PtxzSUUwO+1DU9Cv9U8KxXtvYraLaQi5eKWRjCNzZiPznA6E5BbnrU8H9jf2lpi66NENwbm5Mv2MwiHyPLOwMU+TO77ufm6Zrzqir9pvp/X9fqYey0tfp/n/n+Re1PU/7SMJNlZ2piQpm1h8veMkjcBwSM4zjJHXNaPhXd5et/Z8fav7Ll8n1+8nmY9/K8z8M1gVc0w30N0b3TGZJrJfPMikAoAQM89eSBj3qNXf5m2isb/hSCG50LWYrs6UBJbsLU3clukomyuNrOQ4GM8529e9aunS6GNI0yxuk0n97p139rlZYjIJQW8v5+qt0xg8578VwDsXdnbALHJ2gAfkOBSVXPpbyt+f+f5GTp3d79bnY6rqcmo+AdLWGXSyYBMl1F5dvHKnzgrsXAYZHUp15zXJ2wc3cIi8vfvG3zSuzOeN275ceuePWoq0tU0Y6Vb2jy31rLLcwpN9niEm+JWUMpYlAvQ9iaUpXfMy4x5Vyo1PGtoiXlndQtpZElpEsy6fNblRMEG/KRHC898AHtWd4fuNIt72Rtdg8+Ax4RfIeXDZHOFmiPTP8R+ncVpLBIr6G3kvrUJKqMZ1ZnSMMM/NtUnI7gAml1fS5NH1JrOWeG4IRJFlh3bHV0DqRuAPRh1AolpJ+rKWqQ/W5tOn1Nn0aHybXaMJ5TR89+GlkP/j34Ct3w9d2iabYsZIEms7tpHE8yoqA7f3oUnLsApAAzg9R0zyVFY1KfPG1xSXMdFFBJd+Fddu7WDThaw3cTM0qH7TGGLBRGegX1HsK52rrvqLaJEJJpm05Z2EcZlyiyYBJCZ4OCOcVSrS3K7en5Iq90dBr9tnStOnLab5yxslwLSWDO7eduVjPPy45x9aytKksIdUgfV4JbizVgZY4m2kj+o9gVJ6bl6ipViws5NR1K2soCqyXMqxIXJCgsQBnHbmtJS5pXRCXLHUv+JpZJtY3m9tryAxr9ma1UIiRfwoE/wCWZHOVPOcnnOTY8L37W41C1VrNHuLZhEbqOLaXBU4LSDAGAeCcZx3qhNpaRa0unx6lZzAuENyC6RKc4OS6qQB3OKfo+i/2zqw05L+0tpnbZEZvMKytnAAKI3X1OB70qcnD3l1v/X4jmr6PyN3SZLGOxla4tLC7vftL/aY2ubWFSmBtCF1I2/e5jKkflVqzuNFGnQRvFpYLRQhi6RlwWWXfljzniMe3HQnNcKRgkelFbfWHa1uxm6Wr1Ov1KO2g0mVbiHTY4W0+3NuIhF9oaYqhLHHzjjdnOB+J55+40poI7BlvLKZr5NwSO4GYfmxiQnAQ9+T0qrcXMt3IJLh97BFjBwB8qqFA49gKZEiyTIjyLErMAZHB2oPU4BOB7Ams6s1Undf1v/XyLhHljY7+a106PxVo0uq3Gn3FsmmxwAR38Eii4SHChyC4Ub8fMylfXIzUN5qGn295qFx/ZWkwXMWmDyVae1u0llM6YYLEqxbwpb5QvQZIOTnmNf0KXw/fRW0t3bXizW8dzFNbb9jo4yp+dVYcdiBWXSdS7fq/v1/zGo2t8j06wttJnvNSv4U06NCtj+9FvavErtDulRVnZIlJYc7TuGDgYzVWLVLpR4m0uO10fTrtruOWC0u4LNEVAzZUO6hGwCuOemSvU1xmm69f6Vby29o0DQTMrvFcWsU6FlyA22RWAIBPI9alh0/WfE0mpalGjXj26Nc3crSKCBySeSMnAJwMnAPGBTlNdPMSj0fkdHa6nYyaXp+nXo0x4/7IvPNeRI2dJg87RqH6oc7SAuM7h1GKw57Sc+AbW88rThbi/ki81FP2ovsBw56FMdPcmoIvD7z+FrnW4b+0dLWVI57UeYJo95IU8psIO09GJ9qn1LTb0+E9O1WXWIr+z8xrWK3Ekpa0YKHKYdQoGCPuEionLmu35fnf9bFJa/f+RiwBjcRiPZv3jb5m3bnPfdxj68V0WsRWEGq2tzew29xbvbxrLHpd5BGfNCjcfkVwOf8AZwexrIfSZ4rKzuZnjjF65EKMTuKg434A4XORnuQcDitG88IXtjqVrYzXVmZbqeWCMq7bQ8blME7e7Dj684rOWJp0vcm9d/uTv+A1TlJ8y6fqb76n4bPxbF55F15X9qB/tX9pR+Vu87PmZ8r7mOcZ6fxVleG5LWX4iae2lQTQWvnfv1uZ1l/dYPmksEUbdm7jHTPNYNlp019cSwRlUmiieTy3yC+wZKjj72ATg+lTaN/aE11JY6XJ5bXkZilbhcR/ebLdVXAyfYHPFTzwitX8K/r5Ds3fz/r9ShLs85/Jz5e47c9cdq6AbW+G8htwybdSjFyHIbzG8uTYVwBtAGQQd2Tg5HSq+keGLnWo5HtLq1VEnEGZGZcko7gj5emIz79OKoWuqXdnZXNnC6fZ7oDzY5IkkBIyAw3A7WGThhgjJ5ojUhPmpxeqtf8Ar5DcWmptaO/+RUoorb1Dwtd6baxXE1zasksscQCMxILxLICcr0wwz70TqwhJRk9XsJRbTa6GJRW5qXhW50q+tba8vLNftE8kAk8xtkZSTYWY7eFzznnism9s59PvprO8jMU8DmORD/CwODTp1IVIqcHdP9ByjKDcZbkNFFFWSFFFFABRRRQAUUUUAFFFFABRRRQAVueGtYk077bbjUpbBLmBlSRXcKkmQQxCZPQEZAJ5rDrR0zQdR1iG4k0+2kmW3TcxSNm3HI+UYB+bnOPQGtabmpe52f5ET5WveN/SdfisrGWMX9o159pd5prs3RW6UgY/1eCw4PyyDv7mrVn4qs4dOgtzemNRFCjxrG20fLKHHT3jHuMdhXIR6RqUrTiLT7pzbHE4WBj5X+9xx0PWlj0fU5YBPFp128RG4SLAxXGM5zj05rb29W1rdjP2cL7nTavqSwaXJbXOorMkunW0cNgqv+7fZG3mHKhc4B5BJ5A+mb4kJGraWVm8gjTrMiXJ+T90vzcc8deOay7iw1P7ML27tbvyMKonljbbjA2jceOmMe2K1tfS4jsdK099Y1HUZGt4pY7OVD5UAkQFVj/eNk84+6tZ1pynPma6/wCf+ZdOKirLt/l/kQ+KLiC9ure5i1SO/k+zxxSsBLu3KoBYl1Gcn8aPF/8AyHk/68rT/wBJ46hltToWvWyteXtq8YjkeaO3aOaBiMnarFSSD0ORn1pfFMEsHiCUXGo3GpPJFFL9quQRI4eNWG7LNyAQOp6VnUbc23vdlQso6diXw9rlno6zi9077b5pXadtsduM/wDPaCX17Y981maldR3upT3MEPkRyOWWPCDaPT5FVfyUD2qtRUdblHRWutTyeEzp/wDbctnJDKxEbyS4liKAbBtBHUHg4HzfWtF/EVr/AGdaRW89mlsqwB7aQXBkjKldzKvMQOQTuGCQT3JrAXw3qr6Oupx2U727MwysTkhQAd/TG3nrnsaq/wBmX/2SO6+w3P2eRgqTeS2xyTjAOME5rs9rVi9u3f5GHJB9e53UXiS21LULG2S8aUm8jKIUYDP2liO2OIyuPQce1Z9tqK3WveHrebUV1O6j1RXM6q4WNC6ARjeoOMgnAGBniuaGlaxaPFMthfQtvXypBC6ncfu4OOp7VNYaRqC69ptvOlzp0t1PGIZ3jZWXLAB1zjOM54NEqtSUeVrr/k/0F7OKbaf9aljSLsWPjD7S+ofYI47gtJJl/nQPkp8gJOR2PFWPD6xL8SNNNvcx3MbX6MJIwwBy2cfMAf0qG7tpde8WfZxqOp6pyElu7i2aSZVBwTsV3JA+v5U/wmsn/CSfYLbW9Q0mS6cW6TWcZy5LYAceYhC9+/0rmTfsoror2/D/AIBtNLnkzKtbaynhvpLzUPsssMe63i8ln+0PnG3I4XjJyfSugPjO+07wjo+m6Jqk0GyK5S+t0BCSB3bCuCNrjaTgHIGT0NcmwwxHXmtC18O61e6fJf2ej39xZxoXe4itXaNFGcksBgAYPPsaz6Fvc7nWfGNndeB4tN0q50tbZrOCFtPn+2meKRdu90XJtgxZS28AMQxzyTm18RdZinuNd0fUfEMOoSz6wptYfLm8vSkQuHJzGACdwBEYbOCSScZ86fQ9Xi0mPVZNLvU06RtqXjW7iFjnGA+ME5BHXtVjU9G1u1mW+8S2GqWsd1OQ93dWz7pGz8+C+NzdeM9eppy1evf/ACEtEkdjLf8Ah+Hxj4f1AeJoJILPT47Z5LRbuJo5Y4SqlmEaOIy+ASh3YzwKu6l4w0W78SQXcerwxX50N7UavFHdOttd+axD75d05Hl/IH5YbhgDGBxOteF3s9cstP0N7rVjfWsVzbqtptlYSLuC+WrPyB6E1Qk8P6zDq6aVNpF9HqMmNlm1s4mbIyMJjcePajd/N/frf8w2+5fdpY7rw54ri0u51o3niO2u9XuHgaPWbqbUAksaqQ0fmRbJweV4I2nZ7KaLPxl4c06dLm7tftl3eapLd3n9lytbW6JgxqmySJi6FXkbHynD4Jz04qPwt4gm1SXTIdC1KS/hUPLaLZyGWNTjBZMZA5HJHcVJpHhe/wBZh1GSBooTp6FnjnLK0jBWby1AB+fbG5wcfdPOcCjTd/0tP8g12N20i0K28JeItPj8T2Ae7uYmtVeC63OkTSYJxCQCwZSBnvziq839lf8ACsYbFdfsWv0vnvTaCK43bWjRdm4xbNwKnPzY9zWZb6HaXXg291iK+mF1YzRRzWrWwCESFgpWTfkn5eQUH1ovNDtIvB1nrlnfTTNNdNazW8tsIxG6orEqwdtw+YckL9KTXutPy/S36DveSfr+pJ4qBm/sm9ibfazadBHEQOFaNAkifUOCf+BA96wVZkYMhKspyCDgg1q3OnyWelaet3evGL1jOtrglY4z8olPOMnBwPQZzyKtXXh7TodVs7ODXYblLm4lhaaOMER7XKoxwx4bg+wPfvlUrQpytLrfo/V/1+o4xco3XS3/AABupX6w65Z69p7w+bPtuZIlb/VzA4dWXsGILY6YbFXbO3tl1nV7XSZUZdQ09zZKjBiCxSTyvZtqumOpP1rEsNJe81KawkYw3SJJsjK53yICdnXgnBGeecetGjWD6letDbXBhu1jMlsAD+9dedgI6EgHHqQB3zXJOnTUGub4V+F7xv3St+ZtGUua9uv4oz614NBMnhK61uedrcRTxwwRPEQLktndsfOCVxkjB69uMv0jSrPVo5J9R1qOylM4QiYBiwKOxfJYd1C/Vx9Di12xqRlJwW6t3/pmLi0lLowoorb1DRNPs7WKW31qG6Z5Y0aNEGVVolct94/dLFT7jr2BOrGElGXXyYlFtNoxo43mlSKFGeR2CqijJYnoAK7eWK6uvipYw6ZcPFeWgtoZ7yKDz/KkijRZJSvQhWByTxxmsW70yx0fVLM2fiESK1zIj3VsnzQKkm0SDa2TkfMOR7Z61n3mi3tprsmkeS092snlqkCl/NJ+6VA5IIII9QRVUqkaiU47fNbfiE4OLcZEOpLt1a7X7Qt1idx56DAl+Y/MMdj1oqu6NG7JIpVlOGVhgg+lFOOisD1YlFFFMQUUUUAFFFFABRRRQAUUUUAFaOjXtvaPdR3vmrDdW7Qs8SBmTJBBCkgHlfUVnVqaRoUurwXckc8EQtoi+JZo03HIGPmYYHP3unbvWlNSb91X0f3W1/AiVramjpuvWlhp62sU0sLW9y00Fx/Z0M7NkLgkO3yEbRypP6VZt/F1rHawxyLckpHCjYAwdglz36ZkB/A1gwaFf3JcQJC22Qxj/SYx5jD+FMt855H3c9R6ip4vC2sTWouI7QeWyhwWmRTgg4OC2edpx6kEdRW6nWtouxm40+rNPV9QtrSGSMS3M11c6ZbW/lOgEUS7I2yG3Enp0wOSfxj8VWFxHLpF3dW9xFZTafaqtz5JKtiJd20nAYj0zWVNoGpW9l9rlgURCNZTiZCwRsbW2A7tpyOcY7VZ1vTrCyGn21lHcC6mtoZppZ7hPLJkQNgLsG0AnqWNZVnKUryVtdvv/wA2XTSS0fT/AC/4AurPa6xeWUWifbbq48mO2ELWoDOVUKCoV2JJ9MfnUnjWGS38SmGeNopY7S1V0dSGUi3jBBB6GqupWNrperQRTQ3DweVHJKguI9z5UE7HUMuD2ODx1pPEen2um600FgJhbtDDKgmcO674lfBYAA4LY6CoqX53fe7v6lQtbTsWPD3iq88NrOLJN/nlS3+lXMPTP/PGVM9e+faszUr+TU9SnvZxiSdy7DzHfn/edmY/iSal07RNV1cSHSdMvL4R43m2t3k2Z6Z2g46Gq1zbT2dzJb3kEkE8Z2vFKhVlPoQeRUPcroX4Lyyk8PtYXjzxSRztPE0USuHJUDa2WGPujkZ69K1X8TwNDA8UjwOI4Y5oEsITvWMrkedkPj5AcEe2cc1mjw7O2gJqi3FrhpGXy2uYlIAUHPL5zz93GfzqFdB1F7dZVhRgwU7BMnmAMQFYpncoORyQByPUV1qVaL0Wun5afh/VzBqm+vf+vvOosvE1tqOsWNui3G6S8QguBgE3TSZ6+jD8RVLTNQtpNf0Kxs5bm4C6qtxJPcoEYszoMABm/u5znkmsuXwnrUPl+ZaKDJIsSgTxkli20DAbj5hg+h4OKdaeHLka3ptrqSeXBeXSwF4ZUcj5gGGQSAwz0PI9KHKq4pSX9XX6oXLC7af9akgh/sPxjv16C8szBcCcR/ZvnbDZHysVwCO/6Vd8KWbah8RLKbR4by7gjuknlc2+DEu7ksFLAAepNZ0WnWN/4pWysYLiK0EgRo5buIysAcHa7BFJPYY/Ol8O6fp194oi0zU4bto7icQI0M6xtGS2MnKMG+gx9a5lf2ce2tvw/wCAbztzy/H+vvKNr/Zvk339o/a/P8v/AETyAu3zM/8ALTPO3GenOav3fiF20HRLKxmuYJtNWcMyvtGZHJypBzyvB6elYjDDEehrpY/A93L4Lj8Qpe6eFed4/Ie/t0YKqBs/NIDu5x5eN3Q45FR0uV9qxq6t43ttR8PiCynksrmSxgsp7VdHtSsixhF/4+8ibadittIOCMZwM1d8e61pcWs+JNKW71K5m1DWFe8lnt1C2yxM42xDzCZDhsAnZwoGOeOTk8Ha3Fo/9pyW0K2/2dboD7XD5phJAEgi3byuTjIXA5z0NXL7wdcAaBaaXbTT6hqkLsQt3bzRTOHIHlNGxxgDBDEHdmnLV69/+D+glovL+kal14g8IyeJNGvj/aV7b2VilnLFc6dCACkRRJQpmZX+bDFGwOMEmrN7460S7vI4dl6lo+iPpU1zBZQW8iM0zSeYkEbBMHhSm4cM3J6nm7/wL4h0xrMXllGv26VIbcx3UUodnAK/cY8EHIPQ846VD/Z2jr4rXTHu5vsYb7O94Mf6zG3zAMf6vfzjrt75o3du9/x3/P8AH0sba+n4bfl+BtaB4k0TRLTVNLSe4e0upYZ4b2bRba5fcgYFWt5ZGQD5zhg+Rj3IFuH4jWtlNBOdNi1e8bUpL+7vL6JoHdidq7UhlC/czlWyAWIHHJ5GLw9qdxrVzpMFvvvbXzfNj3quPLBL8kgcAGs2i99f6/rT8Aa6f1/Wp2NvqXhSDw3rumx3mrxnULhJIB/Z8TCNI2coGPnjkhhnA4wfvVXl1Hw+3w8i0hLzUzqEd015g2EYiLsioU3+dnA253bef7orlqKVtGvT8P8Ahh31ub/iUC9t9M1W3YvBJZxWr858qWJAjIfTIAYeob2NYFFFPqLobGqamk2pWWsWc+2+ZUkuAFIKTocbumDuwG+pNaOnCyk8bx6tZSCPT7Zk1C4wNogxhmiGep3/ACLjOciuWorklhYuHJF20a+T/wAun6mntNdR80nmzvJtC72LbR0GT0rUg07Tv+ESur+7utl/58aWcCSo3mLz5hZB8y44wTgHPGe2RRXX0sQ227sKKKKBE1paT315Fa2kZkmmcIiDuTXVzS2t/wDEa0WLUfItLJYLeS/hukhYrCio0qOxxn5SVxkkYwDXHUU72EWL/wAk6lc/ZZpJ4POfy5ZPvOuThj7kc0VXopJWVht3dwooooAKKKKACiiigAooooAKKKKACr2lahHYSTieBp4LiFoZESTY2CQchsHByB2NUa19E0i11O3vpLm/jtTbwGRA4fruUZO1G+XntznFaU1Jv3ez/LX8CZWtqWbHxN9hsGsoRqMECzNJEbS/8lxuAGHIQh+g5wO9Pg8WmGCKM2ZcxpEpYzfe2CQZ6d/M/T3qHTfCN/q0Ty2LxyxCUxRyLFKVlYY6EIdo5HL7Rz7HD4fB17NaLP8Aa7NCyK4jZ23fMGKjhSMnYw69vTmt/wDaLLtp/wAAy/dXY/VNWtIY3isoWe4uLG3gluDOGQKI0JCoF4OVAOWPQ8DsniWONn0q9823ntmsbaNlgu4zICsahlKglkPUZZfzqpP4dnhs3m+12kkkduly9ujMZFjcLgn5cfxDIzn2xzU/iCCytzptna2VvalrOCaW63yszs8YJLAsQACc/Ko/Gsqzm5Xlvf8Az/4PzNKfLb3e3+X/AACHUbu21y6tI7G1e1lWNLcNc3iFCFAC5YqgX3JOPpT/ABeyN4hIimhmEdrbRs8MqyJuWBFYBlJBwQRwaZq8FvpmsW3l2ttND5EUhjEsrRzZUHJJ2ON3XAxijxTa21prpSxt1toXt4JREjMyqXhRiAWJOMsepNRUvzu+93ccLW07FXTtXudLEgto7N/Mxn7TYw3GMenmI2Pwqtc3D3VzJPKI1eQ5IiiWNR9FUAD6AVZ07SLnVBIbaSzTy8Z+030NvnPp5jrn8KrXNu9rcyQSmNnjOCYpVkU/RlJB+oNR1KLkGo240V9PvLaWUCUzQvFME2MVAOQVO4cDjj61pS+LZZ7a3SQ34eERKY0viLdwmP8Allt4yAO+M847VUtLrQk0VorvT5pL/wAuYCZXIUMdnlHG7+HD547jr2dNp1unhG0vENs8st20clwsku6P5AdjIUC8ddyk9cVCxs4u1mru2y6Xs/T8Q9hGSv6mpY+Ko7nVrOOa3W3jNyhaVpuEH2hpSTwP72PwzVXTNXs/7c0W3tojZ2VvqKTyPcThySWUFi21QFAX09cmn6/pmmaToGnpayafdXNzAszzobnzWy78qGCxhMKByN3XjvXP2NpJqGoW9nBjzbiVYkyeMsQB/OnTx3tqXNsk3urbP8tBToKD9V/X5moWj0PxUbi9jS78qbzoxaXsbKTu3Ll1Dgj1HX6Vc8Mm3uvHdpfQGKytYLhJ5ftt9Eu0bsnDNs3fQAn61i6wLNNUli0xSLaE+WjsSTLt4Ln0yecDgcD3qbRbjSLd5v7as5LpW8vyhGxG3Eil84YdUDD6kdOtT7Zqinyt26aX1/rXXoXKH7x33IbW5sYYb5Lyw+1SzR7beXzynkNnO/A+9xxg8c1oWWu2S+FZdE1SwuLhRcm6tpbe6WExyFNh3AxvvXhTgbTweeax7toHvJntIzHA0jGJGOSq54H5VtWng3Wr3w5Nq8Gm37xpJGI1S0dhKjByzhh2XYAev3hyO97xu/6/pifxaFHWdW/tZ7JvJ8n7LZxWuN+7dsGN3QYz6V09v450exbQXsdBvll0Qv5Rm1NHWRXZmYMBAvOW4IPA7HrXEIAzqCwQE4LHOB78Vu6l4cihu7K202/hu57qOHbCA4Ys4zkEoAFz6nPrWipuSuu/4u5Dkk7Pt+CNObx95y6SBp2z+zp7ObPnbt/2eJY8Y2jG7bn26c9aym0zT38WeSNRhXS2fz/tJcZEP3sEdfMxxt67uPeppvBWo28iiaWGONkdzLKksQUJgtw6BjwQeAQe3PFNuPCF1azypPfWKLDG0kkpd9qbXCEfdyTlhwAfz4q/Y1FLmtrv/X3E+0jblv8A1/TJ7bU9H1bxhqWseJEU2czTTC1DSCR2YHYqlBjIOPvEDj8K5iul0vSYLC71Q6na22ora6d9qgBkkEUm5o9rfKUbGHPHFUNNs4Luw1S4ZLdpIoS6QmSRWiG5fnXghhzjDN3zWag0+Xsvyv8AiXzJrm7v/IyaK3NLis7rwzrAmsITc2kKTRXYeQSAmWNNuN2wjDH+HPvWIiNJIqRqXdiAqqMkn0FSPpcSit3WPCGr6JpdnfXun3sUc8ReUzWjxrA3mMoRie5ChucfeH1rN0qWyh1a2k1WBriyWQGeJCQzpnkDBHP4iplLlTdr2CxUoq7qk2nzSW50u2e3VbdFmDsTvlH3mGSeD/kCp/D1ra6jqyafdrg3g8mCUMR5Up+43uM4BB7Me4FQ6qjT9pJNW+8rl97luZdFK6NHIyOMMpwQexrXtLrQk0VorvT5pL/y5gJlchQx2eUcbv4cPnjuOvZzqciTSbv2BRu7PQx6Ktyaf5ejw6h9rtW82Vovsyy5mTAB3MuOFOeD7GqlaEhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAVb07UX06aRliinSaMxSRS7trqex2kHqAeCOlVK6DwZbW11rUkU5jMpt5vJSa0E8TERsTuy67SAMgjPOOKqN09CXa2pSTWgLZrabTbOe3EjSRRSGXEJbGQpDg44HBJ6VPD4pvYIY4kitysaxqMq3RA4Hf/pof0qTQ/DsOr6bc3BupzPE21LOzgSeZxjJbYZFbaPVQ2OScYrc0/RdFn8MWYkt7N7+5024uFHmzrctIjyhWXnydoCDIPzEBsDOK15qiTd/6toTaJhaprsbxGCwggXzbSCGa5AfzHComV5OANy44Azjqe6+IJ7K4bTLy1vLe7KWkEMtrslVkZIwCGJUDBIx8rH8KtP4Pj/fWcOos+rwQRzy2xt8RYfb8qy7slgHXOVA64JxzDqPh+202C7nsNSN3caXcpDdxy2gVAxJGUJZt67lI+ZV7cdamo5SleX9f1ccLJWj/AFt/kUr3Uk1u5tUmgstOCKsXnr5xVUAwNwy5wB6DP1p/im6trvXS9jcLcwpbwRCVFZVYpCikgMAcZU9QK2tS0Ua94o063hFtZCfS4rq4eKKOFFxFvdto2oCcdyoyeSBzUB8HWp1pLSHVhcWxtjPJPAbdjBhtuJD5/lrzjnzD1XjJxSlGbk2+7/C/+QRcUtOy/EwtO1vVdIEg0nU7yxEmN4trh49+OmdpGepqtc3M95cyXF5NJPPIdzyyuWZj6knk11Fx4Ms7C6v11LWGjgtZLZI3gtlmaXz0LrwJNowBzhiOuCeM89q+nNpGtXunPIJWtJ3hLqMBtrEZ/SplFrcpPsU61jrynw+NJ/sqyEYfzBMDN5nmYA3/AOs25wOmMe1X7DwNqOoaENVhlxCUZ8fYbx+Fzn50hKduu7HqRXORhDIolZlTI3Mq5IHcgZGfzFZTpxm0pdNSoycdUWb7UZb+O0SZUUWluLdNgPKhmbJ565Y1HY3clhqFveQY823lWVMjjKkEfyrp9Z8P6MNQ0Oz0u4uYpb+C3LeZbjafMODIT5hIb/ZAx71HD4QsbnWv7Lt9b33UbTrOn2UjYY1LZU7sMDgjqCD2I5q/YpRcLaa/8Ey9qmk2YWsGzfVJZdMYm2mPmIjAgxbuSh9cHjI4PB9qpV1lh4GN5a2l0+oLFby2LXkrMqr5YD7AoLOqkk45JUf1z7nQ9Ns9eeyuddg+yCEyJdwp5wLbchCEYgEn5TgkDrzQqbpxSfT9P+GK9rGpLTcw6tRahLFpNxpyqhhuJo5nYg7gUDgY56fOc/hVWigoK1P7en/0ORbeBLuz2CO6G/eVX7oI3bSO33e1ZdFVGUo7EuKe5qf235csslpp1naGWF4pBF5hDBup+ZzgjtjitBPFH2pdQfU7e2kMsL+XCRIFd3mRyCVYEY2kjkdO9c3RVqrNCcIs6TStVhvrvVf7Uu7fTxd6f9mhZo5DFHh4yq4RWYDah7H3rO0/Vl0qO5hWxs7wTqY3klMo3JkHA2uuBkA9M1mUVHM1Lm6j5VblN3TJrK28N6y0t9AlxeQrDFZqkhfiZHznbtxhT/FnjpWFRRUlFq71CW8tLK3lVAllCYYyoOSC7Pzz1y59OMVVoooAK1PD13a6dqq6jdtk2Y86CEKT5so+4M9AAcEk9gccmsuioqQVSDg9mNOzuK7tJIzucsxySe5pKKKsW5sXWo6afCdppttah71bhp5rx4FRgCuBEGBJde+Tj6d6x6KKOtwCiiigAooooAKKKKACiiigAooooAKKKKACiiigArQ0jXL7Qp3m00wJK42l5bWKYgYION6nGQSDjGe9Z9db8N2i/wCEoaIvdw3MtpcLDPbSxr5f7ly25XjcMCBjjaRnOad2k2hWvoZFr4m1GymkmtBZRSyP5nmLp8G6NsdUOzKe23GDyKRPE2qRaWtgk0QhSJoVf7NF5qoxJZRLt3gEs2Ru7kdDXVeA9T0/R/CfiPUFg1SLUIIIVN1Y6ktu4R51GEPlMUPAycnI4wKq65dNovhnRH0+2s5xrFnJcXd9dWcVzLLMZXVlEkisUKgL93acnceSKHJpfgCSZz8vibVp9PFlJdL5exYy6wosrov3VaQDeyjAwCSOB6CnXnijVtQVFu54nAkWVwLaJfOcdGlwv709eX3dT6muhvfCGk29vqFjH/aB1HT9Ni1B70yIbaYP5Z2qmzKjEgAfeclegzxpXPgDQbzVp9M0WfUbeW112HSpZrySOQSLJ5mWVFVdpBjIALHdn+HoG5Svq/6vb8xWVr/1tf8AI5CfxfrNxeWt001uk9qNsTw2UMRC427DtQblxxtORjjFRx+J9ShvJLmH7HG0sPkyRpYQLFImc4aMJsPIByRngV1Wuf2Ra+C/DktvpmqQ6cNUvj5U92nnS4WEblfyQq8jGNrYIIz6aEVtps3xz1W21+C51fzGnKNLJEpZhCzZdREVY+mAuDg84xS53vfv+X63K5bL+u7/AMjgb3xFquovM17dea07xPIfLUbmiUqh4HYEj371SvbyfUL6e8vH8y4uJGklfAG5ick4HA59K7DwPNpkvjSRNLh1Ow86znW3f7ZDK0X7hy+/MGHDAEYAUjPWo/D3hjSbrTdHl1VNRuZdavnsoDYyIq2pUoNzhkbzCd4OwFOB154NW7f12FojjaK76DwdoJsYLWaTUH1O4029vBPHLGIENu0wUbNhZgwh/vDHXnOBg35TT/CWkW8SMF1APd3TjgybZGjRM+ihCfq+ewpXX9fP/JlNNblI+I9TaKyRpomNiUNvIbeMyR7TlRv27iAT0JxUVtrN/aaw2qW8+y8ZmdpNikMWzuypGCDk8YxW5qGn6XfaxpNhY201m93Fb5lMysoDKM/KEGW988ntSDRdAluHFveTyiGCWWaGN2LDYAR87xJjPIxtOMZyeldPsZuTs9m/w3OdShbbcoN4v1tpo5Gu1/dwtbrH9nj8vyiclCm3aV9iMDjHSpNF8UyaRrUurG2jkvDC0UQiWOGJdylSWjVMMMHoNvPOa0dR8N6Pp8t05a+eG2ikJUSIGdkmSPrtwAd3ofX2qTTUfQL3WpNIubm2f+x1mjcSbZYd7xHBZcc89eOKipTlGN5f1e/52ZVNxbXKv60/zRxlFbmjSCXTda3PcC4a1LvIJFKyLvTKsCpOcnOQwqfRL67bwj4hsWupjaLaxyLbmQ+WH8+IbtvTOO9Zyjypeav+LX6Gid3bzsc5RXQn/iY+AGlnA87SrtIYZCOWilDsUz32shI9N7VQ1Kzt7fTdMmgttQie4hZpZLqMLHKwYjMRHVcYznvmpej/AK7XGZtFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAE93Y3enyJHf2s1q7oJFWaMoWU9GAPUH1qCug1Ty38F6G07ss6iZYVUblaPzCSWJxtIYnAAbOc5HQ8/QAVf0vXtX0NpG0XVb7TjKAJDaXLxb8dM7SM4yaoUUAW59V1C5kunub+6me8INy0kzMZyDkb8n5sEZ5qay8Q61pthLY6dq9/aWk5Jlt4Ll0jkyMHcoODkDHPas6ijpYOty9LrmrT6TFpc2qXsmnwndHaPcOYkPPITOB1PbvTG1XUHaVnv7pmmmFxITMxLyjOJDzyw3HnryfWqlFAGrL4q8QT30V7NrupyXcLF4p3vJDJGxUKSrZyCQAOOwApl34k1y/v7e+vtZ1C5u7YgwXE107yRYOflYnK888Vm0UAbEXjDxLDfTXsPiLVo7q4CrNOl9IHkC/dDNuycds9Kjj8T6/E14Ytc1JDfHN2Vu5B9o4x8/PzcEjnPWsuigCympX0Xl+VeXCeVE0Me2VhsjbO5Bzwp3NkdDuPrU7aqZdATTLiHzPIlMltNuwYg331x3U4B7YIPqaz6KALLajevZpaNeXDW0Z3JCZW2KfULnA6mn3Gs6ndEG61G7mIUoDJOzYU9Ryehx0qnRVc0u4uVGpZ+IdQs/tTrdXJnniKLMJ2DRkurswPXnbg9OtP0nWo7S5v31WG4v0v7doZSlyI5MllbdvZW5yvcd6yKKHKTVmJRSd0XbbWNQsA8emX95aQsxby4rhl/PGATjvirNpq9ra6HqNqbSeS9v1Eb3DXI2KokV/ubMk5Xru79KyaKTbasx2SdzQuNV8zQ7XS7eEQwxO00rbtzTynjcfQBcADtljnmnaprlxqtrY2rxxQWthGY4IYtxVdxyxyxJyTz1x6AVm0UhhRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAX9O0TUNWtr2fT7fzYrCEz3Lb1Xy0HfkjP0GTVCiih728v8AMFtfz/yCtO/8OarpmlWmpX1r5VpeAGCTzFbfkZ6A5HHqKKKvlXs3Ltb8TKU2pxj3uR6lqz6lDZw/Z4LWCziMcUUAbHLFmYlmJJJPrjpgCqFFFQak9jY3GpX8NlZR+bcTuEjTcBuJ7ZPFS2mkX19rC6XaweZetIYxFvUZYZyMk47HvRRWsIKTin1dvy/zMJ1HFSt0V/z/AMhupabdaRqM1jqEXk3MJAkTcGwcZ6gkdDTLayuLwTm2j3i3iM0nzAbUBAJ569RRRWT2b8n+RtF3t52IKKKKBhRRRQAUUUUAFFFFABRRRQAVc0rSL7W777HpcHnz+W8uzeq/KilmOWIHABNFFD2b7J/gg6op0UUUATxWVxNZz3cce6C3KiV9w+UtkLx1PQ9Kt6h4e1TS7QXN9a+VCXWMN5it8zIJAMAk/dYH8fWiiuDEYmdKvSpRStK9/lb/ADN6VNTUm+iM2rNjp91qU0kVlF5rxxPM43AYRBuY8nsBRRW+JqypUZVI7pGdOKnUjF9WkT3OhajZ3F9Bc2+ySwRXuV3qfLBKgHg88svTPWqy2Vw+nyXqx5t45Fid9w4ZgSBjr0U/lRRTw9R1cPGrLdpP77f5hOKjNxXdr7iCp7eyuLqG5lgj3JaxiSY7gNqlgueevLAcetFFVWm4Ruu6/FpELVpAllcPYS3qx5t4pFid9w4ZgxUY69Fb8qgooopzcpST6O34J/qHQKKKK1AKKKKACiiigCzfafdabJHHexeW0sSTINwOUYZU8HuKrUUVhh6jq0Yzlu0HYKKKK3A//9k=)The input line is sent here if itcontains the boolean operators (&&, !, or) – **we replaced the java || expression with (or) to avoid misleading the lexer** – and processed as follows.

1. **![A close up of text on a black background

   Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDgRXhpZgAATU0AKgAAAAgABAE7AAIAAAAHAAAISodpAAQAAAABAAAIUpydAAEAAAAOAAAQyuocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEphcnZpcwAAAAWQAwACAAAAFAAAEKCQBAACAAAAFAAAELSSkQACAAAAAzgxAACSkgACAAAAAzgxAADqHAAHAAAIDAAACJQAAAAAHOoAAAAIAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAyMDIwOjA2OjA0IDIyOjAzOjA5ADIwMjA6MDY6MDQgMjI6MDM6MDkAAABKAGEAcgB2AGkAcwAAAP/hCxlodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIwLTA2LTA0VDIyOjAzOjA5LjgxNDwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5KYXJ2aXM8L3JkZjpsaT48L3JkZjpTZXE+DQoJCQk8L2RjOmNyZWF0b3I+PC9yZGY6RGVzY3JpcHRpb24+PC9yZGY6UkRGPjwveDp4bXBtZXRhPg0KICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICA8P3hwYWNrZXQgZW5kPSd3Jz8+/9sAQwAHBQUGBQQHBgUGCAcHCAoRCwoJCQoVDxAMERgVGhkYFRgXGx4nIRsdJR0XGCIuIiUoKSssKxogLzMvKjInKisq/9sAQwEHCAgKCQoUCwsUKhwYHCoqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioq/8AAEQgBbAGDAwEiAAIRAQMRAf/EAB8AAAEFAQEBAQEBAAAAAAAAAAABAgMEBQYHCAkKC//EALUQAAIBAwMCBAMFBQQEAAABfQECAwAEEQUSITFBBhNRYQcicRQygZGhCCNCscEVUtHwJDNicoIJChYXGBkaJSYnKCkqNDU2Nzg5OkNERUZHSElKU1RVVldYWVpjZGVmZ2hpanN0dXZ3eHl6g4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2drh4uPk5ebn6Onq8fLz9PX29/j5+v/EAB8BAAMBAQEBAQEBAQEAAAAAAAABAgMEBQYHCAkKC//EALURAAIBAgQEAwQHBQQEAAECdwABAgMRBAUhMQYSQVEHYXETIjKBCBRCkaGxwQkjM1LwFWJy0QoWJDThJfEXGBkaJicoKSo1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoKDhIWGh4iJipKTlJWWl5iZmqKjpKWmp6ipqrKztLW2t7i5usLDxMXGx8jJytLT1NXW19jZ2uLj5OXm5+jp6vLz9PX29/j5+v/aAAwDAQACEQMRAD8A8NzVmSxuIrYTyhEVgGCtKocg9Dszux+FVq12uIG00i7uYLiZIwLcxI6yxnjALbQCAM9SfaiTa2LpRjK/M+hmTQSwbPNXbvQOvOcqehqMcnrW3c6o10tjLJqTusYjEtu7SE7lPLdNp9euarT6ndXd/g37RxrMzxSMWxH9MAkDHYUlKXVGk6dNbS7dv8ylcw/Zrh4fNjl2HG+Jtyt9DVjT9VuNMaQ20do/mYz9ps4rjGPTzFbH4Vo3OoQw6nf3dreq7XEOI3RXDBsr6gYPBOf61atr2KT7Vem5aPKW6POsjRsX28jcFYnJHPGDjr6pVJJXsafVqcpuKl1f3L5mXZaU2qWd/qMt9aWcVsy7/NVxvZ9xCqsaHH3T6AUWmlSXOh3l/b6hbqbQB5bTMgk2llQMPl2EZcfxZ68Vq3HnnQfEhuipla9tS20kjkSkYzz0qloX/IB8R/8AXlH/AOlEVWndHLOPLPl8/wBTG86T/no3/fRqxeW17YPEt3ujM0STIN4OUYZU8HuKqo7RyK8bFHUgqynBB9Qa7q98VR391oV9qeuTX9nb/ZvtmlTPM7F04dyGHltnGfvZOfrWkYprfqvuMm2vuOH86T/no3/fRo86T/no3/fRr0W58Zxi9eSTVLCZks7lba5tftjzK7KNgLXGSORkBThTk8da0LnxPBrF1q9zpetrbPDaXHl3kkcoEEbXUOzGELDjONoyCc8Hmq5E+orvt1PKvOk/56N/30aPOk/56N/30a1/Fmowaprvn20xudsEUUt0VKm5kVAGkweeSO/J6nmrGg+I7DSdPa3vNK+1uZCwk2WhwMDj97bSN2/vY9qz7lGB50n/AD0b/vo0edJ/z0b/AL6NEziSZ3VdoZiQvHHPTgAfkBXX6vqSwaXJbXOorMkunW0cNgqv+7fZG3mHKhc4B5BJ5A+mkIKUHJu1v+D/AJEylaSS/rY5DzpP+ejf99GjzpP+ejf99GuluPE/neJR9puHutIW4WQQsu5VAGAwQ9OpJ6Z71oadfrc6jarcap/alxbC4na8+ceTH5RwA7ruBBBbhTt7A1oqMZPSX9d9/wCrEOpJLVHFedJ/z0b/AL6NHnSf89G/76NdlqWsT286Xh1Bnjk014rGfzpJXZhJySzIp3ZB+baBwOciqmg+INs11ealqbpet5Sh5XnAkjXOcmEgs4wMbjjrk0eyhz8nN/Wvn/Vw55ct7HMedJ/z0b/vo0edLjHmPj/eNd3H4r0+1adbO9MMbTTugjjZR81wjKen9zfj0yehNcpdRafcQahejUAlx9q/cWggb97GSSX3dFxxweTms6kIwUWne/4FQk5Npqxn+dJ/z0b/AL6NOid5JkR7jylZgDI5bag9TgE4HsCa7e9120vPh1Bp11rq+dbRRLa6fp0t0sbneC32iKRBEWA3HfGw56hs5Gx8RdZinuNd0fUfEMOoSz6wptYfLm8vSkQuHJzGACdwBEYbOCSScZzen3/5f5mi1RweuaNc6FqUFpLqEF0txBHcRXFu0gjZJBlT86qw49RQ+h37eI5tF0+6g1KeMviWzuA0UoRSzMrnAIwCfwrodeubFtc0O60LxfZwy21jBatdwrdxG3eOPBbPkhsE8DaCeeQK1X8XWel/F+41vTfExfTtTMgnmtPtCeWGQqpkVkUttYhuA3Tjmp629f8AgB0+7/gnn2m2d5quoR2lq53vklnfCooGWZj2UAEk+grQ0jw7fa1HJJaX1uqJOIMySOMko7gj5emIz79OK1bOe61DWNct5dd/tzULzTGigvA8zmZgyOUBlVXzsRlAxz0HWuNqKinKNoOz9LlR5U7yV/8Ahh/nSf8APRv++jR50n/PRv8Avo12Gm67ZW+kWajU/s9rDayxXmlCNz9rkO7D8DY2dycsQV28dBnN1TxLdPp1pp9hfyfY/sEcM9vjCFxycqRgkYHzdeBg1yxxFac+VU+u7uv0/wCB5mns4JXcv608/P8AAi1Tw9faTYpd3F5A8byRxgRyOSN8Syg4IHG1gD71R1SyvNI1B7S6kDMoVlkjcskiMAVdT3BBBFUa6rWre5a58OaXFHLJqlvZIsiRxl5FLSPIibRySEZePw7V10ozUUpu7v2sZSa6Locx50n/AD0b/vo0GaUnJkck/wC0a2PGSSJ4y1JbjUk1SXzvnvEjEYlbAydo4BB4x7ViVSd1cTVnYf50n/PRv++jR50n/PRv++jTKKYD/Ok/56N/30aPOk/56N/30aZRQA/zpP8Ano3/AH0aPOk/56N/30aZRQA/zpP+ejf99GjzpP8Ano3/AH0aZRQA/wA6T/no3/fRo86T/no3/fRplFAD/Ok/56N/30aPOlxjzHx/vGmUUAP86T/no3/fRo86T/no3/fRplFAD/Ok/wCejf8AfRoplFABWw2iQW/hm31a9vJEe8eRLaGKAOG2YBLsWG0ZPYNWPXUXXjO5n8N6Rp5ur2V7SV2ulllJjnXcpRTydwG3oRx2q48rvcznzXXL/WhiTaLqlukDT6beRLckLAXgYCUnoFyOc+1R3WnXtlHHJe2dxbpLny2liZA+OuCRziuvn8Y6Ut9cXNqL+Y32pwX063CKPIWNt21MMdx5IydvAArmNZ1ifVNQu38+c2sty88cLt8q5PB25wDjA49KJJLb+tv+D9woyk3qivp2n3Gq6lBY2ahpp3CLk4A9yewA5J9BWxo2ly3Gr3kOl6hfLZwKxe9tLSR92AduVQ5AJHBPTrVbwpd29n4jha8l8iGaOW3ab/nl5kbR7j7Atk/Srvhy5tfCviS4fXftUc1uskHlQQrJksrKSSXXgZBGM59qSSbs+39f15lylKKvHcp6SvibyLibQxq3lXAK3D2Yl2yY6hivX73f196txaP4q/4Qxp4P7QOkSS5a0TzdjAKG80oBtK8D5vUVd0fxXp+j2umWsZvZYrLVTeO3lqnmR7Ao+Xefm68Zxz1rPOr6bc+G7vTbk3UDm/a8gaKFXVsoV2Nl129uRn6VTUbaf1t/m/uM+abl/Xn/AMD7znq1NY0STR7awa5FzHPdQmSSG4tHh8v5iAAW++CMHI45xWXXQ63faLc+H9MtNPur+S4sEdCJ7NI0cM5cnIlYjGcYxz7VP2TXqc9T455YkkSKV0WVdkgViA65BwfUZAOPUCrejatNomqR39qu6SMEAebJH1GPvRsrDr2Iqz4h8R3XiO5hmvE2tEhRf9Jnm4znrNI5H4ECpGVrDS3v45JTPDbQoyp5k27Bds4UBQSTwe3amy6TfxXF3CbSV2ssm4KIWEQBxkkdBnHPTmr2i6xFY2M9rO80HmOskdxBGHeMgEHALDBIP3s5H48X7W4ttRTxDqV5fzafHLblYIYbpQ0z5GyN0+864HJAwCOSKyTnzu+39f1/Wsq97M5atG8sJ49JtdQu3ufMnbYizQOFMaqNpVzwwxxgdAKzq2ZLrTD4XjsUnuzdJM0+DbKELFVBXd5mcDHXH4V0xScZf11/yuJ3ujGq8bfUdHFpffvbNp0MlvIsmxyvTcADuAPOD0POM4NVbedra4jnjCF42DKJI1dSR6qwII9iMVo+INTttZvRqMcc0V3OM3cbuZE3/wB5GYlsH+62cdiR0i7Vmit9ws7LV/FOosFa4vZ1QlpZS8m0AEgE8nnGB7mq66Lqj3j2iabeNcxrueEQMXUepXGQOadot9Hp2rRXE6s0QDo+wAsAylSRnqRnNaOm6tp2nW93ZpJK0MrxyJcSafDK2VBGDE7FR944IbP51vGNOSTkzOTknoZcGj6ndLuttOu5lztzHAzDOcY4HqKQaVqJtXuRYXRgQZaXyW2qMkZJxgcgj8K6OHxfCsJFw91NKTKWkEapvLzRvnaGwMqhyB3IFPu9XtLaCxvmkumle0ufItvLHl/vJZVyzbuOvICnOBz6U6VPlTUumoued9V1OOrb1/T1SOw1KLULnUG1RXmZ7mHZJvDlWz87bskE5zzVCT+zP7Hg8o3f9pea3nbgvk+Xgbdv8W7Oc54roxr+iWK+HprGS+up9Gl3GO4tEiSUGUyH5hK2CM4HB9fasIpPc0ba2MCfQNYtbuO1udJvobiVS8cMls6u6gZJCkZIGDz7UHQNYGpDTjpN8L4rvFqbZ/NK+uzGcV0cvi+3g1CGSzvbmS3ijuvLRNLt7IxSSwlFYeU3zHlck4I28VoeFruDWbc2y2s939i0T7NPbLA0zzZut/yRo6MwAZejrjB6jg0op6L+txNtf15nO6d4L8Tzz3Jt9Kv7e4sYxOQ1tKr5yNoXC53c5A46E9qibwtq8+nfbEs724uvtM0Vzbi2dnh8sISz9xzJzkDGPetzVryDSvFupR6tLN5OoacsDeTbBZbQFUKo0TSHDLsVSC5OOSc1R0jxLZaPJpEUT3kttp+rPeufLVDIhWML8u8jd8rcZwM9eTRaN7f1e/8AkF5Wv/W3+ZzaWly9pJdJbytbxMEkmCEojHoC3QE4NQ10EEdqPBepTXGozRTTXMf2azjuVKTYJ3GSIZYFQeGOBzxmufrLqWzQ1DTZdKjs3kNxHPNH5jJLbvEYzuIGCfvcAHIqG/t7yC8/4mG43E6LOWd9xcSKHDE5PJDA88881p3epafHY6aNNmnluLAMoW6sYzG+5i2SC7A4zjBBzVnWPGU99qNtcW9vYhYbeGPEml2xyyxKrcbDlcg7QegxgDpWs1FTstiYNtamZa6I7+I/7G1CZbG481oCz4ZVlGQFYg8AtgFhnGc81nzwyW1xJBOhjliYo6MOVYHBBrpdQvZPG3jd3gENtbyXDyLL9nigMUO7cXkZAMlV5JJJ461k+I9Rj1fxNqWoQKViubmSRARztLEjPvWOtlcrTUdo2kw6jBf3N5dSW1tYwCWRooRK7EuqKApZR1brngDvWXXS+HYpdS8Oa5plvCZpxClxBFBH+9kIlQMPlG51C5O05AxuwCM1zVPqHQKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA0dD0aTW7428c0UO1GctJIq9FJ4DMM9O3TrSR6JeSzyxJ9mPlY3yG7iEYJ6DzN20k4PAOeD6Go9Kv8A+zNSiujH5qqGVk3bdyspUjPODgnmtLTvEUWlrdQWcd/BazsjjyL7y5lZQR/rAmCpyeNvp+PRBUmlzO39ehlJzTdiGDwprVwpMdnt2synzJkQgq208MR0JAP1HqKj/wCEc1T7L9o+zKE2uwBmQMwQkMQudxxg5wOKvQ+LDFD5bW0kx+f95LcbnbdKkmSdvJ+TGe+c+1TXeu2kUFndQ27SX7WsyhhcApDvll4KbclgGyOR1HHrThR5U09ba+v3f13FzVL6rqUL6x0+08NaZOsV019eo8jSGdfKULIyY2bM5+Xru/CodT02PTrfT3ZJC08ReQieN0fDEfIUJxwMc85zV3VYhP4R0SeKe2YW8UkUsYuY/NRjM5H7vdvxgg5xiquoajY32nWdna2VxA9sCiSS3aupDMWORsXueueKxjy2lfe5pK912HeILGwtF02fS47mKG9tPPMdzMsrIfMdMblRQR8gPTvVHT9L1DVpmh0qxub2VV3MltC0jAdMkKDxzWr4oQW8Gi2pntppbew2S/ZrhJlVvOkbG5CRnBB696ytP1GfTJmltktnZl2kXNrFOuPZZFYA+/Ws9Lv1ZTvZfIbfafeaZdG21K0ntJwATFcRGNgD0OCM1esPD0+oaPcX8dxbJ5TogSW5iTdnOc7mG3pxkc9ulUb69l1C6M86QI5AGLe3jhXj/ZQBf0qxp2owW1ndWl7bST29yUYiKYRsrKTg5KsMcnjFXT5b++TO9vdEi0W+mtDcRxoU2swXzkDuq5yypncwGDyARwfQ1Ym8Laxb2r3M1qqxINzHzoyQMA9N2ehBx6HPSp18Tyf2Gmnlr+Lyo2iT7NfGONlJJ+ePaQx5IOCMipbjxZ9pilj+x7PN3jPm5xujjT07eXn8fauiMKDurvy9fuM71L7Gbf6BqOmRs97AqKkgjfbMjlGPIDBSSuQDjPXtV3X9LsLXxO+laUk8YgkMUkl3dxneR3BKoEHsSfrUniLVrR7zUrXTYWCXN6ZZp2nEgk2lsbMKAF+Ynv259XeLUgj8Z3V3M8N5Z3MrSp9ivYmLL25XftPswz7VjJQVRW2/ry/QuLk43e5SmtLCx8US2d5bXj2iSmPyhcRpKPTLhXX8gc1X12xi0zxDqFjbl2itrmSJC5BYhWIGcY54q7cTReIvEyz2UK2bzP5kgu72NUyOTh2CAcdiSal1S+01PHGsXN3aLqlrJcXHlrHcFFJZm2uGXOQMg46GonZPTz/SxUb218ivo/hLWNetftOnQQGAzi3Ek93DArSkAhAZGXLEHgDk846Glh8I61cWLXUdrGFVXYRPcxJM6pneyQlhI4G1slVI+VvQ4rHVs+F00fyfu3jXXnb+uUC7cY9s5zXQQeP7hPB8GiPJrEBtoJIIjp+rG3gkViW/ew7GDnLEEgrkYB6ZqX1t/Wn+Y10v/X9Iy7rwXr1npP8AaVxZxrbi3juiBcxNIIXxtk8sNv2HcBuxgHg81NrujadFpegXmjJcwf2pFIZI7y6RwjrKY8h9iAKcZ56eta+v+JdMtLd4NKtXlv73RbKzub03iyRKghiLqkYQbWygUku2MNwD0qy+LtEEGgJa6BdFtElDoLvUEmjnUy+YyuohXqTgc8DqDT+1bpf/AD/4Avs362/RGVP4P1qG6srdLaK6e+do7drK6iuUdlxuXfGzKCAQSCRgHJ4po8Kao2o/YozYSyCHznki1K3eGNM4y8okKJzgYZgckeoz1F/8U3u7zSpfsN5cpYS3LP8A2lqbXMk0dwgR49+1dgCg7cDjI4ODnK0TxfZeG9UuZdCstUtbS8tPs84XVQtyp3Bg0c6RLs5VeCrAjOevCXmU7dP61/yIdH8Fz3fiCXTNZuV0tYo0drjCzIfMZVi2lW2srF1O4EjbkjOKbouh2F5YeIINRhvI9S0y1kuI3SdVjBR1QoyFCTyx5DDp0q7L8Q7uKC+SwilmmvbiOWW51p4tSkZI0wiEyRY4Ysd2Aeg7ZMkXjXRn1PW7+/0G8kn1mEwzi31FIlXdsZ2AMDcl1LegDYwcZpO9n6P77afj+QK1/mvu6mVZ6Vpl54E1LUhHdpqOnzwIXM6mGRZC/wDBsyCNvXcc56Cqc2mRWnhu3v7l3+03sjfZolIAEaHDO31bgAf3WJ7Vpad4g0Sy8LajpE2j6hK9+6O066kiBTGWMeF8g/3ueeccbaqXs9vqHhTTmSVEutN320kLNgyRs7SK6jvgswIHT5T34ff5f194gv4PDkVtE9hc3c8vmx+bGxx+7MSl8EoOQ5ZQeeB0PUxy6ZZ2figWV7NJ9gaRds6EA+U4yknIx0IJ/EVkVo3uoRXuj2MUgk+2Wm6LeQNrQ5yoznOQSw6dCPSuT2c4WipNp3TfXyf9dzTmT6BbaJc3HiL+x32xTrK0cjN92MLncx9gAT9BVixh8PS392L24u4LVWT7M3Bdx5iht2FOPkLN7EAc97Nvrtm2uadf3azb/s5tr9sA7gUaLevPJ2EcHHI96w7u3+yXksAljmEbECSJtyuOxB9DUL2lWXLNuOi273d/0+T8ynypXj3/AK/4PoJdrAt5MtmzPbiRhEz9SueCffFRVr6QNGTStUl1fbLcGDy7KFTIHWUkYfgbdoGcgnPoO4yK7UraGTd9TYlt9AGgiSG7uTqXkxnyiPk8wyOHH3egQIRz1J69l1SDw/FYo+lXVzNc+ZHuSTgBDEpfnaORIWA9h07nGpVUswUYyTjk4H51hGg1K/O97/8AA22K51bZbf0/U1da0hLLULcae7zWl9Ek9o0mAxVjja3bcrBlPbIz3qlqWnXWkalPYahF5N1buUlj3Btp9MgkH8K2dZms5r7StJivIDa6bAIJLpt5idy7PIQVBYruYqCAcgZHWs7xBJpcviC7fw/C8Gml/wBxG7EkDA7kk9cnnmuj08/+AR/wDOooooAKKKKACiiigAooooAKKKKACiiigAooooA1PD2l2+r6kbe6u1tkEbuM7ssQpPGFPTGTnt05qbT/AAxc6pNOLC4iuIYNoaeKGZ1JbOAFEZfseSuOOvIznaffS6bfR3UAVmTPyuCVYEEEHHYgkVai1pYlni/s2za0mKsbVjLsVlBAYHfuB5P8WOfpXRB07LmX5mUlO7sX4vBV++8TXNnbsjurLK7ZG1whPyqe7L9c/Wq//CL3PlKTd2gneOSSO33t5jiMsGx8uB9w4yRntTbfxLdWtusEFvbpEoYKuGO0NIsmOW7FAPpn61ZuvEa/Y7U21vbm8NvKktxtffEXkkJVctt+63XBPzdfSn7HlVt7a+ov3l9e5FqUVna+FdI8qwh+03cckst2Xk8z5ZXUADdsxgD+HPvUOrWcFlZ6ZJAtvKJYmZpYpJCJiHI5DKpXGMYHpnNTalLZ3XhXSPKv4ftNnHJFLaFJPM+aVmBB27MYI/iz7VWvdYXULK2szp9narB8scsZlJUEknq7ZGST0z6VjG1pX3uXK90WPEkNmsWk3NjYw2Iu7LzZIoXkZN3myLkb2Y9FHes7T9On1OZorZ7ZGVdxNzdRQLj2aRlBPt1rR8STWbRaTbWN9DfC0svKklhSRU3ebI2BvVT0YdqztP1TUNJmabSr65spWXaz20zRsR1wSpHHFZ9X6st7L5Db6yl0+6ME7wO4AObe4jmXn/aQlf1rR07RbS80G7vZ9TgtpYZI1CyCQhQ27721D1xxg+uazr7ULzU7o3OpXc93OQAZbiUyMQOgyTmpbDUzYwzwPbQXUFxt3xT7wMqeCCrKc8nv3q6bSfvEzvb3S/beEtSu9JOoRAGIo8iDy5PnVc5O4LsHQ8MwPHTkZfceD7y2s5Lh7uzby1JaNXYtwqsR93H3XU9e+OvFUW1fzdPS1ubG1nMSFIZn8wPEpJOBtYA4JJG4HrVqbxTe3EckckVuFk3BiFbjciIe/pGP1roj7B3T+X/B/qxn+8uR6l4dm02Od2u7W5NtMIZ0gZiYmOcZyoBzg9Ccd8Va8S22nxeLptOtLW1022tpTEX3zMHA7vkuc9vlA+lRa/rqX15exWEEENrNdNM0kQfdPgnazbicdScAAc9Kl8T3Vg/iy41KzuLXVLe5kaXy9syBc/wtkIc9/lJHvWMuRVFbYuPM467kF1HbaZ4vnhk022mgSYp9leaVowDx94FHOPwqv4itYbHxPqdpaJ5cEF3LHGmSdqhiAMnk8etTyX0Wva+lzeNY6UWbfLNiYoxHPIG9s9uBipb/AFuCLxlqupWttaahBczT+ULuEshVycOFOCGAORnoaidr6ef6WKje2vkGj+FW1XSxqM+saZpds119kV755Buk2huiI2Bg/eOAMckcZ0bH4Za/qHh5tXgWMw+XLLGojmYSJGWDMJVQxL9xsBnUnHA5XPOnVJzoK6Ttj8hbk3IbB3bioXGc4xgelXj4lM2hQ6bqGk2F8bWJobW7m85ZoEYlto2SKrAMxI3K2M46cVL62/rT/P8AAa6X/r+kW7rwNd22lSXY1LTZporGLUJLKKRzMkEgUhjlAuRvGV3bu+MYJfr9hYTaP4Yu7Cwt9Nl1GKQT+U0zoWWYoGwzO3QchfwHap9f8YQyWos9GtLNPP0y0tLq/VZfPlCRR74zubaAHTGVUZC9SCcwv47kCaP9j0LSrOTRpRLZyxfaGZSH3kEPKwILcnIz6EU/teV/8/8Agf1YX2fO36L9bk2pfDLXdM1DTbVzE/8AaJkEcjxTW4TywGkLCeNGCqp3btpGM4JIxVXS/BFzrusvYaDqVpqaxW/2ia4tYLpliXcFwU8nzGOSv3UbrnoDiV/iDfLPp72GmaZYR2E08yQwxSMkpmULKr+Y7FgyjHXIBOCOMU7fxUtneTyWehaZBaXVv9nubAG4aGddwYElpS4YEKQVYfdHqcpeZTt0/rX/ACNaz8Brp3iW7svF7zW9naJCZJ7fKHMzKIziRcrwxYqyhsIw4NV9F0m1W38UaZq2mQve6bZyzR3JklEkUiSIm0AOEI5PVSfeqkPjfVdOs7i28OEaBFcXCzyf2ZPNGxwm0JvaRmK8k4JPLH2AtReP5VvNSu7rQdKvLjVIhDdSzm5BkXC7vuzLyxQMT1yTyBxSd2mvJ/lp9zBWv81/wfvILC1sLv4d6vcSadCt9YXFuI7xZJd7LIX3BlL7MfKMYUH3qjdWNtYeGLOeVPMvdRZpYzuOIYUYp0HUswbr0C+/Fqx8Vx2Ph+80lfD+lyxXjB5ZZGud5KlimMTADbuOOOe+aq3V9bX/AIYs4JX8u905mijG04mhdi/UdCrFuvUN7cv/AIH9feIkv73QHtov7O0uRJ1ljZ/Mkba6CJQ6/fPWQMfXB69gXVpYab4oi+0QtLpUxWZASwJgcZBBHOVB/NefSsSrtxqIudHtLOWHMtqzhJ93/LNudhGOzbiDn+I1yexlC0Yttap66+vy/U05k9/6/r/IsLZ2+k+JmstbjaW3jlMUxRip2ngSKfYEMOx47GrEMGm6HrGoWHiG0e7aCVY0MTEcrKu48MOCgYD6jp1qKO+sdSvdOOrhoY7WIR3MqZZrhUztUDHDbcJknHAJxVHVL+TVdWur+cASXMrSsB0XJzgew6VCjUqS5Z3WmttNU9Leut/K1ym4pXXfT9f0IrtoHvJntIzHA0jGJGOSq54H5VFWvpGoabYaVqi3lr9ru7qDyLdXhUrCSQfNDk5VhggADnPXsciu1K2hk3fU2JbrQm0EQxafMuo+TGpnLnb5gkcu2N3QoUHTqD07rql3oMtii6Xp0sFyJIyzu5KlREocfePWQMfoevYY1KoDMAWCgnGT0FYxw6Uubme993/Viud22W1tv61NnXtNtobyyudNHk2OpwLPCsj5EJ3FHQseoV1YZ64xms7UrL+ztSns/tNvd+S5Xz7WTfG/urdxWrquo6fdanp9pFLL/ZemwrbpMIAzSfMWd/LLD7zsxAJHGM1S8Qaha6r4gu73T7KOwtpnzHbxqFVBgDoOBnGcD1rf08/+AR/wDOooooAKKKKACiiigAooooAKKKKACiiigAooooA1/DNlYX+reTqbShPKkZVjTdkhGPJ3LjGM989Km0/QLTURcTx6g8VlCyRiSZIonZmBONryhcDB/iJ6cdcZFpdzWN1Hc2r7JYzlWwD+h4I9jVqPXL2KWZ4/swE4XzIvskRibHQ+Xt25HrjPJ9a6ISpWSmv6+8ykp3fKzZtvB1vLGzy6uuAzgNBD5qsqyKmQdwzkuuPx/Gv/AMIxbjy4TqLfbJoppI4hb/L+7ZwQW3cZ2HGAffHWs6PXtRij2RTqifNhViQAZdXOBjj5lU/hjpVq68SXMun29vAyo3kPHcSGCMOxaR2ID43BSGAIBA68VTlQ5VZa2/H7/wCuwrVL79fwJtVlEHhHRIIoLVRcRSSyyC2j812EzgfvNu/GABjOKg1iKGCw0iW0MbxvCxDG1EbsRIQd/wAzBue/pjii+vtPu/DWmQLLcrfWSPG0ZgXymDSM+d+/Ofm6bfxqtda1d6hbRWt2bcQRn5fKs4kZBnJwVUHuTjPNYxatJPe5pJO67F/xQ4ng0W6MFtDLcWG+X7NbpCrN50i52oAM4AHTtVXw/wCH7nxFeyW1m+144/MJ+zzTcZA6RRuR16kY96f4gvrC7XTYNLkuZYbK08gyXMKxM58x3ztV2AHzgde1Y9Z6XfqynsvkaGt6NPoOptY3TbpFUMT5MsXX/ZlRG/SrmmWGkz+HL26vprmOeKWJQ0UAfYG3dMyLnOOc4xjjOaw6tWOp3OniUWzR7ZgBIksKSq2DkfK4IyPWrpuMX72pM02vdNWLw1E2jpeT6jDbySxNNFHI8SgqCQAcyB8nacYRhyOeuLN34PhtrGaZdTZ5YlY+X9mwCVVHI3bvSQduvtzWKNYvBY/Y2MMkIDBRJbxuyA8kKxUleeeCOakfxBqUqsstzuV87h5a85VVPb0RR+FdEZUNU4/8P95napfctapoFvYxXjWl+109jcCCdWg8sZO7BU7jnlSDkD2z1qz4slgPjW5tpo4LW0tZjGgtLKJcKOmVXbvPuxz71R1zX5tWvLjYVjs3uGmSNYUjJyTgvtHzMAepJ6nnmpvEGq2V14ll1bR3mk89zI0d7aR4Rj2xucMPcgfSsZOHtE1t/Xn+pcVLl13FvpX0vxtceTFZkrOU2GzRosHjiN9yj9cVV8URR2/i7VoYI0iijvZVREUKqgOcAAdBSjU11XWI7nX52jUHLy2llGXY9eVBQH6k5qa58SXEPivUtX0WRrc3ks+0yRqWEchOQQcgHBxx+dRO19PP9LFRulr5Gp4f0bw1eeBtY1DWLq/hu7We3QPb2ayiIOX+6DMgbdjnIG3AxnJqtH4c0aPQLPUNS16e1kv0na3iWw8xQY2KjzGEgKhiAMqrYycjAycrSNf1DRPtC2DwGO5ULNFcWsVxG4ByMpIrLkHocZFQXOpXV5a21tcSBobXf5KBFUJubc3QepqXuNHTf2VaXngXRfscsW641ZreaV7AJMjlEyPMEh8yMZBAIXnNWvEnw6tNC0Oe+ttce8lgYhojZeWCBO0DHdvP8aEjjkdcdKw4/Gmsw6PDpcTWK2sDiSNRpltuVxj59/l7t3yjLZyccmor7xbrepWktte3vmQy53r5SLnMrTHkDP32Y/jjpxQ/iuu/4WQLbX+tX/wCfxA1vo3iZLKytbd49JcQt5sQYXMin52fP3gWyAOy4HvRq+kadb+Lo7c3JsNLuxFcJMUMpt4pUDjKjltu7HqcVBqep2Os6xbX96txG8wX+0PKVTuYcF0yerAZIPRieoqeLxQF8aJ4gltX/cSK9vbwzBBEEAEa5KnKgKAeAT6ihdL/ANf10/QT20MKZUSZ1ik8xFYhX243DPBx2plTXt099f3F3MFWS4laVggwAWOTgenNQ0le2pTtfQKKKKYgooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDd8F+WfGOmpIZ0d50WKSB1Vo3JGG+ZWBA9MfjW74UitE8Ua9PcXVwt1a2928UiQKxTAOZAdy4cdgAB7iuNstRvdNmM2nXk9pKy7S8ErIxHpkHpwKfJq+pTXUlzNqF1JPLGYpJWmYs6EYKk5yRjtWikkl8/wAf6/qxjKDk352/AZf3DXeoTTPdT3Zdv9fc/wCscdi3J5x7mteIiw8CNcwKRPqN49rJLj7sUaIxQHtuZxn/AHAPWsCtC21Uw6Nd6ZPD50EzLLH820wyjgOPqpII78egrPozZaNFu6KP4LsjCZ1VbuRWjd1ZS+xSWGFBGeOCT0rIt41muI45JkgR2AaWQMVQep2gnH0BNXpL7XDo6LLdah/ZrHyVDSP5Jx/CP4eOOKrf2Zf/ANnfb/sVx9jzt+0+U3l5zjG7GOvFazalPmXl+SREdFZmj4m0+30m8hsbW1kVUj3i8kcN9sDdJF2koE4wApPfJJ4B4UjspdbEeoWzXAaKTYodQMiNjyCpz7dMHB56VkvcTSQRwSTSNFESY42YlUJ64HbOBn6U7F1YTRS4mtpcLLE/KNg8hlP8iKmnLkkmxyXMmkbWm6Zo97b3d/cvLa2cLxxLHJcEtlgTkukLf3eBsHXrxzo2XhrRJ7fzjcXlwjGQxyRMsYZVlSMcMpIz5gPtjpzxza61qiXj3aaleLcyLteYTsHYehbOSOKj/tK+5/0245JJ/etySwY9+5AP1ANbxq009Y3M5Qm9mdB/wj+mBo7Um8NzLb3E3nb1EcfltIBkbckER88jHv0HONaXKWaXbW8q20jlEmKHYzDkgN0JGRxV261++udMt7EXNwkEcZWWMTsVmYyM+4r0z8w656U2S31o+H4ppYb86QkhMUjK/wBnVzwdp+7k4xxzxWVRxfwlxT6nSXcNx4mh8GWl/eyvJdh4DcTOXZQZ2UdTzgdB+FNPh/wtNq8FvaajcyIsdy91DE7O6CKJnBDSQxDJKkFdp6deeMK91nxFe2sEGo6lqlxbykPDHPPIyPg4BUE4ODxxUmtXnieC8jj8RXGrx3Kxt5a3zyhwjja2A/OCMg9j0olJdu4JM24PC2kXU8FzD9qSzl0s3ognvYom3+cYthnZAijjOSvPTqc1NZ2Xha31DX7eGzur+G303zFk+2xPhgU3hGEJGQSQHGRgHrnIw/D3imXRZJ/P+1yrJbfZ4pLa7ME1su8P+7cq20Eg5AHO41Hq3im9vvEC6rYy3NlPHEkSTLcs05Crt3PKMFmI6nA9MYpuUbadb/jf/gAk+v8AW3/BN/RrHRtY0fSbC5jvo47zWLiG3Ec6Zi3JANzsU+fHHAC5yeRjB4Z12uy9cHFWm1bUXuFne/ummWUzrIZmLCQ4y4Oc7jgc9eBVQnJyeTWcnf8Ar0KWit/W7Lr2NuulrdLqto8zdbNUm81ee5Mez34aqkbBJVZkWQKQSjZw3scEH8jTasNb3tittdvDPbLMPMtpirIHwcbkbvgjGR3FSBp6tcvY6vp99YrHbTrbQTqYYwgD4BzgDHWjxdawW3iBntYlhiuoIbsQqMCIyxq5QDsAWOB6Yqn/AGvcXV1A2sz3Wo28ThmgluW+YdwCc4z6iotU1GfV9Unv7vb5s77iEGFUdAoHYAYAHoKiEXGKTCOi/r+v+HNnwaWt7y/v4JB9qtLGd4Y0JEu4xsPMQ4wNn3jyD/dBNc9LLJPM8sztJJIxZ3c5LE8kk9zW1oH2/S9YmP8AZN1dYhe3ubdEZXCyr5fXadpO4YJB5xwax7lBHdSoIpIQrkCOU5dOejHA5HfgfQVXMnKyfQaTt8yOirMem30tqbmKzuHgCsxlWJiuFxuOcYwNwz6ZHrUMkEsKxtLE6LKu+MspAdckZHqMgjPsaFJPZhZjKKfNBLbybLiJ4n2htrqVOCMg4PYgg/jTKYBRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB2d7pVwfhpp14+lXcKR3bGQI02xoti4lwxZV3Z+8ABTfHElgdN8PrbW1zG/8AZcTRl7hWVULPwQEGWz/FkfSuOoq5Svf5fgrGUadmm33/ABNHw7bQXvifS7W8Gbea7ijlBOMqXAPP0rb0nUZbjx9cyahaxy3Nw00YSQsPLbYyhFCkeyAenAxXJglWBU4I5BHar19eXWu6k1w8Ie6kXMhhQ5lIHzOR6nGSR7miEuWSl2Lkrxa7nQaVpFvPJfPf6JMl1C0YXTobeaRkQg5fYZVfqF53EDPTkYuWWj6Ibcu2lyPlpSBcyOjqFnjQKwVhg4c5+g6c54Wit414RfwL+vkZypyf2jtG0KyS1UtpLC1MFw8uos8mImR5AgBztz8qjBBJyMYPXH1r/kW/Dv8A17Tf+j3rKuLyS5gtYpAoW2iMSbRyQWZuffLGtm9+2v4L083Vhp628e5ba6+04uGUyMWHl+Zyu7Izs/GsasoytZbFwTV7kniPTruLRtJuZdMuLNPJZXVhLsjO9sAbyduRzjjOc1FrkTz2PhuKJdzyaftVR3JuJQBWTJY3FslpNPEojuhvi3OMOobBzg8cg9cVq+Kzei4sI72xsbKOO1C2yWFx58Zj3uch/MfJ3Fv4u1FVpyva2v6MIKy36fqX/Dfhdv8AhJNU03VtP+16lp9rJJBpfm/8fU6lR5eYzubClm2ocnbgGtTTvDrzpqk//CEfadYguIYjoG26X7PCyEmbZ5nnHJCjJbaN3I5GPPqKzLPVLPw74Vh1uy08aVHqMWo+IZtPW4e8kPkwhYeFMbBWYGQ4Y5HByDkYoWZN98JpLbTfC1vqcljqMv2h4xcu8KmEYnYJIAD8pGSNny9OufPVhlaF5VjcxoQHcKcKT0ye2cGmUmvd5fT8Lf5DTV7/ANdf8/wPT73wXp1v8Mri/n0wx3sOn295FfwwSrFMZJEBUStOyyEK/wAwWJdrDr6vvPCt1dSeAjqvhy9sLG4nW2u4G+1CKMNc4CjzGYxll5wCM5yBXltFV1v53J+zb+uh6DHpehaivh++t/DVwI7jUbq2msdOaa4kuI4ljZTtZ8lvnO7aUBA420T6ANI+I1lG+m2lvmzkvLeyiSdCGWORo1ljnZnVyyLlckHjBIOTxup6Le6PeLa36wrO3/LOK5jlKn0bYx2n2ODUtnp+p2fiNLW3eO01K2lyrSXMcQR15++zBc/jzQk7K39af0xya1/rr/SIrXW9Rsrm4uLe6ZZrkhpnYBi5DiQE5B/iUGtHSFj1CHUJ9cWMWbsZJL04WVJTkgR4++TzlOmOcr94ZesLMmtXiXdtFazrMyywQ/cjcHBA5IxnPQ49OKp1zToxnF8ujdtVv9/9ehopuL1NCLW7+1sWsbW6ZbQiRdhReVk27vU87F78YrRjJufhzP8Aaj/x46hGtox7eYjmRB7fIjfX61z1XLnVJ7nTbSwKxx21qWZUjXG92+87HuxAUegCjAraMIxT5Va/+dyOZt6mrqpNz4I0S6uT/pEc09rGx6vAmxl/BWdwPy7Vz1b3iW01a3h0x9UjtY7VrXbYrZ3EcsflqSGIKM3zFtxbJzkn6Vg1XVi6IKKKnsrC81K4+z6daz3c20v5cEZdtoGScDnAHJoAgorRsdBv9S0y8v7JIZILFPMnBuYlkVePmEZYOw5HIBHNC6Dfv4fk1qNIXsYpFjkZbmIvGzEhd0YbeAcHBK4OKNgM6ip0sbh9Pkvlj/0aJ1jaQkAbiCQoz1OATx0q1faBqWm2gub23EcLOqBhIjZLIJF4BPVWB/8Ar1EqkIyUZOzY1FvZGdRU9jY3GpX8NlZR+ZcTuEjTcF3MegySBTr7TrrTXhW9i8szRLNH8wbKN0PBPp060e0hzcl9e3UOVtXK1FFaOm6BqWrxGTTrcTKJBET5iL8xVmA5I7Ix/CidSFOPNN2XmEYuTsjOoorRk0DUotL/ALRe3AtPLSXzPMQ/KzsinGc/eVh04xzRKpCFuZ2uCi3sZ1FWLywudPkjS7iMZliWaM5BDowyGBHBH9QR1FV6sQUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUVp6tocuk2tjcm6t7qC+jaSF4N/QHByGVSOadtLiur2Mytrwnfiw11C7W6JKjxl540YKSjBeWB2jJGTxx14rFoqoScJKSFKPMrHXaU0CSXzahFp02o7o9iJNaRReXg7tpZGiznbkABvfrVyyu9GjtyTaaXCzNKxjlMcxQ+fGFG49QFL47Ec8gcchpth/aN35H2q1tPkZ/MupNicDOM+p6AetTaVos2qxXcwngtbazjDzzzltqAnaBhQzEknsK6IV3FrTo/wDh/wADGUE932OmljsoLOJnh0tdPe2uS7HyjPI3mSiPZ/HwQuCvHqcDjE1r/kW/Dv8A17Tf+j3rKuZ5JPLheZZo7ZTFEyrgbdxbjIB5LE8881pyTanN4Pj+0PajToJjFbiS3j812yXYI+3fgbsn5sfMPWsKk1O1uhrCNr+ZNr9tnStOnLab5yxslwLSWDO7eduVjPPy45x9aj8Q/wDIL8Pf9g3/ANry1lT209jLF56BWdFlQHDAqwyD+XY1Nqer3msSxSXzQ5hj8qNYbeOFEXJOAqKB1Ynp3pVHzPbr/mhwVkWPD9xpFveyNrsHnwGPCL5Dy4bI5ws0R6Z/iP07iLW5tOn1Nn0aHybXaMJ5TR89+GlkP/j34Cs+tDR9IbV5bgfa7ezjtoDPLNcb9qqGC9EViTlh2qNyjU0C/l/sG/sYG09Zy8ckYu44AHALbvmkGCRkYBPHOO9WYJNNj8Mp5dnaXMhhk+0F7q3idZMtghWXzDgbSNjAHGMdc83DZiZbplurdRbpvG9yvm8gYQEZJ5zjjirNroxu9Fu9QivrXdZgPLakSebtLKoYHZsxlh/Fn2ro9s1Gz7GXs05fM6i/n0ZtPuIYY9LB2yBDGke/iOIrg9cli/6joMVU8UJbwJqEMsOmwut6Fs47MRb1jG7dv2cj+Hhuc9AAK5AHByKlubmW7upbm4bfNK5d2wBlick4FXPEKfQUaXLbU6DxGJT8RdR+z/Z/M+1Pt+0+X5f4+Z8v51W163ig8Vu1qbU28s4aL7LLG6hc+iEhfpxVHVdZvNauRcagYXmxgvFbRxFvdtijcfc5NSeH49Rl1mJNGghnu9rsiTxRSLhVLMcSArwAT+HHNYQkoxSfTUuUW3c0da07+0/H2twfa7S023VzJ5l3L5aHazHaD/ePQDuasaRrVvong1J7e00m61FtTIdb20iuHMIjU7drg4Ut3GD1wRzXNXl3Nf3s93dv5k88jSSPgDcxOScDgc+lTWGnfb4L2X7ZaW32SDztlxLsab5gNkYx8zc5x6A1ik1C3l+Wpo7OV/610O+srrQE8AxvbaRpt5LJbTm9WXULS3limLPt2rLGZ2CqYyvlSAHGCM7sy63DY2nhmZL610KC1k0OyazEAt/tsl20cTFztPmqCN+d2FI5wScnzCrF7f3OozpNeSeZIkUcKnaBhEQIo49FUD8Kp63/AK7/AOegJ2ev9ar/AC1O6vdIiOk+DLe81bSIo7aRorx47+2uTbiS4LBmjV23DacngjscVtasnhSXVvDr3aaPDJ9ou0nVLm1lj4Rfs5mNrHHGEMh54PGQW4IHmL6TPFZWdzM8cYvXIhRidxUHG/AHC5yM9yDgcVY1zw7daA0Yu5reUySTRjyWJwY32NnIHBI4/pWcqsIzUG9Xe39eQ4xbTkv63/r5HX6GYV8TXLeKotBmvRp5NhHaTadFbs/mDO51R7cPs348xT26Haatw6poOj6jqesyONFu3mtreC30uS21A/JtlkkIjeOMKxRB8mFBLKB1x5/YaLd385iAEB+zSXSGcModEUsSvHOdpA7ZHWrEvhm8j1a+01ZbeW5soTMURz+9AAZgmQMkKScHHCmhVoOfInqlf5X3/wAw5Hy36X/T+mdhp2j2kWr+Lv7L1LSlsLuxkisTPqltCW8xo5ETDSDkLwT0BUjORWZoulyH4d+IImvdLSW4mt2iik1S2R3ETSb8KZAe4xx82eM1y1rpc95pt5eW7RstmFaWLd84RjjeB3UHAPpuFU6u3TyS+53Ffv3N/Wd3/CIeHfJx9m2T79v/AD3807s++zyvwxWS19e3BjjkvJnAdSgeY4VgAoPJwMAAZ7ACmpfXCafJYrJ/o0rrI0ZAI3AEBhnocEjjrUFDim7tCu7G9rt/At7bTWUwbVIebm+s/wB3G8g7qB1Yd3G0Me38TUNPtbrX9ZstP+0jzrh0tonuHbamThRnkgc9hVCp7S+u7CYzWFzNbSlSheGQoxU9RkdjWdGlGlFLe39f12KnJyY27tns7ya2lKl4ZGjYocgkHBwe44p1vfXdqpW1upoVLbiI5CoJwRnjvhiPoT61BRWnKmrS1Fezujesbi1Hhm5hsJY7TUSG+0NORm4hxykb9F90xlufmOdlZDX121t9na6mMG0L5RkO3AJIGOmAST9SagorKFGMW3vd31/r7uw3JtJHQ6n/AMiHof2n/X/aLnyPXyMp+nmeZj33VH4stJ7W+sjcRadF59hBLGNOUqhQrwWB/jOPm96zLnUry8uIZ7idmkgRI4ivy+Wq/dCgYAx1475PU1FdXVxfXT3N7PLcTyHLyyuXZj6knk1syURUUUUAFFFFABRRRQAUUUUAFFFFABRRRQB3mreKLO48LJYabNp8ds1nHC9pcJc+bHIp+ZlAzEDn5t3BOTnmqmpXmnLp/htbPV7C5n0slZUeGfYSZdwJBjGVA6jr6A1x1FaOo27mKoxSsejzeJ9DfxTpWp3d9LdyqkvngSTzW1vIRhXjEgWRRu+YgZxxg5Fcv4t1dtXu7Z5J7C5aKLZ51oLglhk8O0/zMR688VgVe0nRr3W7owafC0jKhZiEYhQATzgHGcYHvReU/dSBU4w965teBNUg0rVZ5r7VlsbV4XjkiIlPnFkYLwikHBOefXjNSaNr8OjeHdd0/wC0WU0kixC1b7EsizESAtkvHkjHID9OwzWAui6o949omm3jXMa7nhEDF1HqVxkDmkg0fU7pd1tp13MuduY4GYZzjHA9RT9/Sy8gcYN3b7fgUydzEnHJzwMV0OqM8nhLw/dWrny7US28mzjypvNaQE+hKsuD32n0rJGlaibV7kWF0YEGWl8ltqjJGScYHII/Cr1zYw2Hhi0uBqN152ogyG0WECIqjsoLPvyTkEgbO/Ws2mkarU1LnxAl3c6Td32qyXdtD5P2jT5GkZtyjDOQRsbOM9cnNWZ/EyC5Z3v7SVltp1hnt/tLSK7AbQWmyRyMjBwDk1zOoaU2mx2ZuftEclxHvkjltmjMfzEcbsbuOcjjnFSa5pdtpv2GSwu5rq3vLbz0aaAQuvzsmCodh1T1711PEVIN37v7zFUou1jrZ9di1KfUZ7DVFgaO3lCXLo4ESG4j24wpI46YGQT261nLexX9z4gmgkM+NHVHnKkec6vCGfB55I78+tcikskausbsqyLtcKcBhkHB9RkA/hU9hqV9pVwbjS724spipUyW8rRtj0yCDjis6lZ1Icr/AK3/AMyqdNQd1/W3+RraBdRR6XqVtdaxHaRXUJjW3kEpUvlSHIRCOgIz1puiDGh+JACGAso+R3/0iKq9p4f1fVbCfUba0uLlFcAlY3dpCc5IwDnGOfqKSJ9f/sGaGFtS/sgPmaNDJ9nDAj7w+7nOOvtUz52ldbL8P6ZUeVN2fUrvbWSaPBcpf+ZePKyyWfksPLQAYbf0OeeB0xXe6l4n02XxPp9++v8A27w1HdxSR+Hikw+xoFwB5LL5J2dPlY7vxNcE+j6nHbmeTTrtIQNxkaBgoGcZzj1ptzpd/ZRpJe2Vzbo7FVeWFkBI6gEip5ZLp/X9f8Ad09LnoqeMoLK5s5NQ8T/29qNsL54tRMMriJZLZkiizKgY5kwdu3YuevJxFpvxCaHxH4cv7jXr1Zf7Me01W63y7y5ebYZCOZNoeNuN2MccjFcfrOhQ2PiA6Rpk91fzxuY5P9E2HcOuwK7Fhj6H2qBtOsrfxDJYXt3cx26SFPOS0/eZ7fu3Zcc+p4qVFySf9df8xuSWn9b3O38M+JYNK1bVLzVPGRvdQkMCpeSXOoiKeIZ3jMeyVnX5QofCdeehC22t6TNqXjVI/E9vp2k6u1wlpZyR3QjdmkVklKRxMoG0Ec/MPSuA1ew/srWr3T/M837LO8Pmbdu7axGcZOOlS6b4e1rWlZtH0i/v1UkMbW2eUAjGfug+o/MVOkl5Wf4lap/P8jstN8ZwWWj6foz6s39nR6LfW91AiP5ck7tOYtw2/N96Mgnhc9jmq+oa7aXnw3h06611fOtoY1tdP06W6WNzuBb7RFIgiLAbjvjYc9Q2cjk4dC1e40ubUrfS72WwgJWW6S3dooyMZDOBgdR1Pelm8P6zb6YNSuNIvorE7cXT2zrEdwBX5yMcggjnnIpy13/rVv8AUFo9P62v+Rf8VAzf2TexNvtZtOgjiIHCtGgSRPqHBP8AwIHvWTpt1FZalBc3FpHeRxuGaGQ8N/n3BHqCMg7Gs6KtnpWitpGoXl/b6qHljt5LbymWVX8sgIruGJI4PUjHFZ1/4f1nS7uG11PSL6zuLjHkw3Fs8byc4+VSATzxxUyipJxfW4r2t5WF12eK71V7qC9lvFmAfdOuJI+2xu3y4wNvGMYx0F3wQj/8JjYXAOyGzk+03EmOEhT5nJ9toI98gd6rSeFvEEOqRaZLoWpJfzJ5kdo1nIJXXn5gmMkcHnHY1a0TwxrGp61daGjHTZwoFzHeF4QDvUKjjBOS7IACOpHTrRTioRUV0X5Dm+Z3ZL4VIS+1XUGTZYQWFwJgeh8xCkafUuy4+hPaubroNG0ePU9E1mOTUrq2uNOhN59j+zhopdhCctvBVhvI+4eM81Fb6HaXXg291iK+mF1YzRRzWrWwCESFgpWTfkn5eQUH1puyfyX5v9Q1f3sxKK0G0oxaAmp3E3l+fKY7aHbkyhfvtnsoyB3ySfQ1Y1XR7Gw09Z7TWIbyRpEUwooBAaJXJ4Y9GYofcfhUSqRjJRe78mNRbV0Y9FadloryX2nR6nKunW1+w23EuPlTON5UkHb7nAODg8GodUsrexkt1tb1LwS26SuUAHlseqHBPI/yBSVaDnyJ6/112Dkla5SoorY0XR7HUoGe91iGwYTCPZIoOVKO27lhxlAv/Ah9C6lSNKPPLb5v8hRi5PlRj0VObG5GnrfeUTbNIY/NUggNjO046HHIz15x0rRl0exj0EXyaxC9x5Mcn2QKN25pHUr97OQFDdOjDp3Uq0I2u93bvr8hqMn+Zj0VoanpX2C2sbqKYXFrew+ZHIF24YcOhHYq35gqe9Vbm0ubKRY7y3lt3ZA6rKhUlSMg4PYjoa1JIaKKKACiiigAooooAKKKKACiiigAooooAKK1H8N6rHpn297YeQI1mIEqGRY2OA5jzuCn1IxV3WNDtUstDn0aK6MmqxsfIlkWQ7w+wBSFXr9KrlZHPE56r+i30enatFcTqzRAOj7ACwDKVJGepGc1LJ4c1OPVItOEcMt3IzKIobqKUqV+9uKsQuOc7sdD6VX1HSbzSniW9jVRMnmRPHIsiSLnGVZSQeR2NEW4tSBuMvduamm6tp2nW93ZpJK0MrxyJcSafDK2VBGDE7FR944IbP51eh8XwrCRcPdTSkylpBGqby80b52hsDKocgdyBWV4Z0ZNZv5Y5o5ZY44XcpbzxJKSFJBAkI3AY5xk4q74a8KS6tpd/qU9jqFzb2qL5UVohDXDlgCFYqw+UcnAP4V0QrVE9O34f0jKap9e6Ld3q9pbQWN80l00r2lz5Ft5Y8v95LKuWbdx15AU5wOfSlrFjdv4N8P3q2sxtEhlje4EZMasZ3wpboD7VzsoUTOERkXcdqucso9CcDJ/AVpvpMVv4etby4dvtV/KRaxhgqiNTtZ2J9W4HT7rE9qxnNzsbRjykmp3Gm3Wlafa2E15LPaq0YWS2VA+5y3USMc84xjmrPiyzudPtdBtr+2mtriPTvnimjKOv7+U8g8jiqup+GrrT5LZEkguWuEjKpDPGzlnGcBVYkjtuxg1GPDepvIqRxRShlZt8VzE6ALjdlwxUYyCQTwDmqnCpKVuXZ/loTGUUtxfD/iC58O3slzZpueSPyyPtE0PGQesUiE9OhOPaotb1mfXtTa+ul2yMoUjzpZen+1K7t+tWH8K6xFcNDJaojrGZG3TxgIoYKSTuwMEjr9elT6XokEd3qS69BcFbGz+0+XbTohkyyAYfa4wQ+cgHNRKEkryRUZJuye5T0y8s0029sdQeeKO4MbrLBEJCpQngqWXghj37VoR+IYU0SG3ile2uLeCSBSthDL5gYsf9Yx3pkMQQM+o61n2Omx3djqN1skKW8ZaNUnj3Kdw5ZSQxXB6qOuKm06x0+88O6pM8V0t9ZRLMkgnXymBkRNpTZnPzE53fhV884xS7r/P/gk8sZP5mrd+LLS6t54VS5/e7wNwGOYokGeexRvwIqLxRqFtHeavZwS3NxPc3++VpkCrHsLAKuGJbrjJxwOnpy1bVx4R1m1+zLNbRfaLl0SOzS6ie53OMqDArGRcjHVR1HqKuWInPfcSpxjt0L3jOwktfHV6+rQ3VpbXEzSRy/Z8l17MoYqGGe+ar3ir4h8W+boEN9eSXEnmGH7N86464Cs2QAM54pT4E8Qm+trSGziuZboyCE215DMjNGu513o5UMF52k56ccirmk/DrVb/AMQw6XeTWdn51q91HP8AbbeRJECvgowk2v8AMhB2k7eSeAaxjPlil8y5RuytrX9m/wDCf65/bX2sW/2q52/ZAu/zNzbc7uNucZ74qrHrvkeD4tKt5LiK5j1L7aHRtqjEYVSCDncCD24z1psPhbUJ9Rlso59L86IKWLavaqjZ6BXMm1j7KSR3q5pvhaR7LX31O3nWfSoWHkxXMCvFKrqCZI3YOUGSCUB5xWSVo28vy1Lesvn+ehsQeOoR4VtbZbqWy1O0tZ7beukW119oEjOxP2iRhLFu8xlbbu9R1Iq14j1uw0yzkiFxf3WoX3h6wsvs8kSrb28ZihkLB95LH5chdigFicnHPLW/gvXbrRU1WCzja0kgkuIybmIPJHGSJGWMtvbbtOcA4HPQiqtz4e1Cz0iLUroW0UEyq8aNeQ+cyk4DeTu8zB9duMc9KqXW/wDW/wDwf0CL6/10f6L9TornWPCTWPhqDzNUvk0iTFxBNZRwrcRtMZHAYTMQcHGMc+orWn+IeiRXeiGzguZIrC4vGmeLT7awISeNYwY0iJXegBIJOSQOR24q/wBLttMtNNF08hu7pBcSqpAWKFvuDpksR83oAV4PNO1ez0f7RBD4anurx5JpU2upJYeZiLA2jJZccevp0rKdRRkoNPW/p53fQcU7OS/rc2PD+u6F4b1G+jtbi8u7O/svIe5udJgd4X8xXGIHkeORfkAOWB5yOnNybx5ZwxXrC1TW7u5mt1Sa9sxZJHBCnyKqW0o2kNjgHGEXv05Z/D2onUDY2lu19dJHvlhs1aYw88q20dRxnGQM465AnstLsrS7nt/Fa3unSKsbRoYyjEGRQ2QVJ+4WIPqO/SpliaaV07vstXvvb9ew/ZvZo6KDxF4Vk1fxHfXEuqWg1q3aIQ29hHIsLSFHdsmdeA6sAPTByDxWdpeo+HLbwbq2mXV9qgur+SJ18vT42RPKL7QSZwfm3DPHy/7VZ1ppVlqQ1aOwmmM9qrXFoGxiaFCS4PAIbb8w/wB1hjpUNvpcN54bu723eT7XYyK08TY2tCxCh175DYBH+0voa10a+S+6/wDmTre3n+Jb1EC/8H6Tc27Fv7OV7S5jzzGWkaRHx6NuIz6p7isOGVoJklQIWRgwDoHUkeqkEEexGKZRVNJ3v1Eaeuajb6vdi/RJorubm5RnLpuGACjElsEfwnOMcEjgJ4esLXUtetbfUZ1t7JpAbiUzpEUjz8xBfgkDoOSewNZtFTTgqcVGOyHJuTuyW7WBLyZbN2kt1kYRO4wWXPBI7HFRUUVS0Qmathq0WmaTcx20byXd2pjlMuDEkfB4To7Z7twuOBnBGVRRURpxi21uxuTasdFqqfZPC+j6PIV+1vLJeSKzAeSsoRUUnopITcc9Ay1D4sS1j1S3jtNRn1Bks4lnea4Wby5AvzRq68FV4AwSPesOirF/X6hRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHUal40l1TSY7Wc6jE626W7LBqBW3cLxkwlDyR1+bGefaotQ8R6fd2OlW9vp99bHTDiOUX6lipfceREMNnoe3oa5yirc5N3ZmqcErJHZN8QWXVtPvobBmktInilnnnDXE6MNuGlVF5A6EgkHnmsDW9XOr3ETmXUZFjXA+33v2lhz2O1cD2xWZWp4e0u31fUjb3V2tsgjdxndliFJ4wp6Yyc9unNNc1R8ouWENUibwxrlr4f1Fr24spruTy2jQJcCIAMpVs5Rs8Hjpj3pltrUNlpmsWFraSeTqSxqhkmDNEEfdyQo3Z6dBT9P8MXOqTTiwuIriGDaGnihmdSWzgBRGX7HkrjjryM2IvBV++8TXNnbsjurLK7ZG1whPyqe7L9c/WtFSqytZCbpp3fl/wDna272e31DwppzJKiXWm77aSFmwZI2dpFdR3wWYEDp8p78J/wi9z5Sk3doJ3jkkjt97eY4jLBsfLgfcOMkZ7U7UorO18K6R5VhD9pu45JZbsvJ5nyyuoAG7ZjAH8OfesZRcVqappvQaNfjW4069jtHF/YiNRIZgY3VOB8m3IOMc7qnuPFJllkYDUJlkglh2Xl+Zwm/HK/IMYx07+tVNWs4LKz0ySBbeUSxMzSxSSETEORyGVSuMYwPTOal8SQ2axaTc2NjDYi7svNkiheRk3ebIuRvZj0Ud62lVqQbV+v4szjCMtbGifEVpqiam9/bNHG0MjCJLkKzl5422qSp5GPQ5APSk0q9XWLvV41a2s/N0sW1tHcXKRrhXjwpdyoJwpPbPP0rntP06fU5mitntkZV3E3N1FAuPZpGUE+3Wm31lLp90YJ3gdwAc29xHMvP+0hK/rUTqSnFRl/W/8AmVGCi7r+tv8AIvaXqFlpkV5DeWc9xJcRmBmhu1RQuQePkbJyvXOMdqt6TEsPhfXrl5raNJ4Ehhia6j81mE8bY8vO48AnO3HFV9O0W0vNBu72fU4LaWGSNQsgkIUNu+9tQ9ccYPrmn23hLUrvSTqEQBiKPIg8uT51XOTuC7B0PDMDx05GacKkkvJfgJSgn8zPe6sjo8FvFYbL1JWeS884nzFIGE2dBj16nNdHc+NbSTxPB4mtNImg1kXC3FwWvA9tKcYcLH5YZdx5/wBYcZOO2M+48H3ltZyXD3dm3lqS0auxbhVYj7uPuup698deKr6l4dm02Od2u7W5NtMIZ0gZiYmOcZyoBzg9Ccd8UpUakX7yBTi1ozWj8ZWGnwpa6Jo01vZAXTMlzeiaRpJoGhzvEagKoIIXbk85bniGy8ZGz1Dw/cfYd66RaPaOnnY89HeUtg7fkOJSB1wRn2qHxLbafF4um060tbXTba2lMRffMwcDu+S5z2+UD6VBdR22meL54ZNNtpoEmKfZXmlaMA8feBRzj8KzjHmSf9f1qW5W0Nfw/wCNbDwzLfjSdO1OCK6aFo5ItWEVwmzJKNKkQ3RsTkqAp+Uc8Zp0PjXSn1jxHqOo6JeTS66ZldYNRWJYY5HDkDMLZYFfvdMdq57xFaw2PifU7S0Ty4ILuWONMk7VDEAZPJ49auaP4VbVdLGoz6xpml2zXX2RXvnkG6TaG6IjYGD944AxyRxmF7yv5fmU9Hb+tCxa+L0s3svLsGKWemXWnqGn5YTGYhydv8PndMc7e2eFn8V2svg3+xWsbu5mEaJHPf3iTpa4YM3kL5QaINjBUORg8gnBFix+GWv6h4ebV4FjMPlyyxqI5mEiRlgzCVUMS/cbAZ1JxwOVzWuvA13baVJdjUtNmmisYtQksopHMyQSBSGOUC5G8ZXdu74xglvrf+t3/mGt/wCvJf5FTX57fUbTTtRt5UEn2aO1uIC3zI8SBA2O6soU59dw+uXZXtzp15HdWUrQzRnKsv6gjoQRwQeCODXRa/YWE2j+GLuwsLfTZdRikE/lNM6FlmKBsMzt0HIX8B2qfUvhlrumahptq5if+0TII5HimtwnlgNIWE8aMFVTu3bSMZwSRilJKSals7/8ESv06GFJrITUDeWFjaWzyJiWJ4I54t2eWRJFIQHjjtzggHAp3l5LfXBmnWFWwBiCBIV/75QAfpW/pfgi513WXsNB1K01NYrf7RNcWsF0yxLuC4KeT5jHJX7qN1z0Bxfs/Aa6d4lu7Lxe81vZ2iQmSe3yhzMyiM4kXK8MWKsobCMODURowi00tfx+8pzbTuzG8OXEGlx3+qzzRiWO2kt7aDd88kkqFM4/uqpYknjIA70abcQaZ4X1OVpo2u9RVbOKBWyyxh1d3Ydh8qqM9cn0rR0XSbVbfxRpmraZC97ptnLNHcmSUSRSJIibQA4Qjk9VJ96r2FrYXfw71e4k06Fb6wuLcR3iyS72WQvuDKX2Y+UYwoPvVtr8F9zf/D/IVmvvOaorXurG2sPDFnPKnmXuos0sZ3HEMKMU6DqWYN16BffiS/k0a+torbQtLuEvpJYwMFm3jylVlA3HJMm4jjoR9BE6nJJKz9ei9RqN+piUVqXOiGC8hsUvLaS9YN56GZEihI/hMrMFLdc44HAyTkB0Vnb6ReMNbjhuo5LeURraXcc22TaQjExucYbBwe3Y1H1inb3Xd9ur9Ex8kr2f/DGTRVzVpbCfVZpNIt3trNiPKicklRgZ6k989zVOtYy5op2tclqzsFFbFpdaEmitFd6fNJf+XMBMrkKGOzyjjd/Dh88dx17Qf2Q02ki/sJluVjH+lRAYe35wCR3Q8fMOM8HHGclWV/eTWttev9eZXI7aGdRWlPo0+notxdvYywhxuSDUIJWIz/dRy1WtSvvD7X1rJpelSLBHPI00M0rDzYzJlEzuJBCcEj9etONaMpJQ1T6q1l6i5Gk29P1MOitvUdAjg8WLpdveQxW1yY3t7q7fYgikUMjO2OMBhk+oNY80fkzPHvV9jFdyHKtg9QfStiRlFFFABRRRQAUUUUAFFFFABRRRQAUV1N/4Mj07RPtVzq9sl4LZLn7I7xjcG52r+83lsHP3APQmpNdtob3TPCrlbOylvonWedIUhT/W7QzbQBwO9acjTs9/6/yMvaxeq2OSqzp99Lpt9HdQBWZM/K4JVgQQQcdiCRXTS+ApB4itdNguZ/JuEeX7bPAiRNGq7t8bLIyuMe4xkZx2xtf0a30eaAWmpQX8c0e8+W8ZaM5xtYI7qD34Y0rSj7w1OEtEMi1pYlni/s2za0mKsbVjLsVlBAYHfuB5P8WOfpUtv4lurW3WCC3t0iUMFXDHaGkWTHLdigH0z9at+CbOC+1qSKUxGb7PKYkuLQTxNhGJz864IxwRnmrnhLTrM+Hta1OW609bm3ijEX2uB5Vt90gBZl8tlORwMBiPatIymndPoRJx2a6oo3XiNfsdqba3tzeG3lSW42vviLySEquW2/dbrgn5uvpFqUtndeFdI8q/h+02cckUtoUk8z5pWYEHbsxgj+LPtWLK5kmdztJZiTsUKv4AAYHtitq7gtbDwvpq+WrXGpFriacoGaONXaNUXPTJVyfX5R2rOUnPVmsYqJWvdYXULK2szp9narB8scsZlJUEknq7ZGST0z6VY8STWbRaTbWN9DfC0svKklhSRU3ebI2BvVT0Ydqs6joenS6lp1lpE84uLuKD5ZoAqfOoJctvYg98YwPWlbwraeb8msRtEsUksm0RSSKEAP3Y5WHOeMsOR0HWtpUas2/J+XTQiM4Jev6mJp+qahpMzTaVfXNlKy7We2maNiOuCVI44pt9qF5qd0bnUrue7nIAMtxKZGIHQZJzXQXnhK1sZp/O1V/Jt43eR1teSUkVCoG7nO4ckj+tSaXZJo91q0kYt7zy9KFzbPc2qSAbnjwTG4ZQcMR3rKdOUFzS/rf/ACZUZqTtH+tv8zAsNTNjDPA9tBdQXG3fFPvAyp4IKspzye/epG1fzdPS1ubG1nMSFIZn8wPEpJOBtYA4JJG4HrVjSY4bnT9Xkcxm4W3Mmx7UMoXeuSrBhsbJxwpGM1Po8om8K67bywWrrBbpNFIbaPzUYzRqcSbd+MEjGcc05OUYpPqv1YJJv5kU3im9uI5I5IrcLJuDEK3G5EQ9/SMfrS6/rqX15exWEEENrNdNM0kQfdPgnazbicdScAAc9KwwMnArrbjwXbJ4kg8NWuqyy62bhYLhXtAltEcZciXeWbb0/wBWM4OO2W605bsFCK2Kfie6sH8WXGpWdxa6pb3MjS+XtmQLn+FshDnv8pI96ryX0Wva+lzeNY6UWbfLNiYoxHPIG9s9uBitmy8FaXqr20+ma/KdPka5Sa4ubDy3haGEzZ2LI25So65z1+X1v6F4O8Ot4n0yK/1G8vNO1LTpby3/ANCEbkqJVIcCb5cGIsMM2eAcZNZqbgrf1/WhTjd3/rsc5f63BF4y1XUrW2tNQguZp/KF3CWQq5OHCnBDAHIz0NZx1Sc6Cuk7Y/IW5NyGwd24qFxnOMYHpW9oXhTS9fv7wW2qX0en24jAu57W2h+Zs/KwkulUHg4AdicHgYq3Y+H4NMbxlplxNBPqGm28yfvbESxlUlRS8chkBjfPT5W4J9azsoxt5flqVq5fP8zEPiUzaFDpuoaTYXxtYmhtbubzlmgRiW2jZIqsAzEjcrYzjpxWrr/jCGS1Fno1pZp5+mWlpdX6rL58oSKPfGdzbQA6YyqjIXqQTlLDwVY3uiWtw2tSR6headc38VoLPcgWAyZDSbxjcIjjCnnrjgmre+FYLXwhBrNveXN7JIitMLa2SS3tixwEllEpZH9A0Yyc4JAzVS0un/W6/wA7/iKPl/Wz/wArEr+O5Amj/Y9C0qzk0aUS2csX2hmUh95BDysCC3JyM+hFK/xBvln097DTNMsI7CaeZIYYpGSUzKFlV/MdiwZRjrkAnBHGKOtR2+lRaXYwQRvItvFeXMrIC0jyqHC5P8IUqMeu4/Rup6zp2q3duTpMdhbpNK8gtNoZld9wUHaB8o4Gf0rKc5RlZRutbv8A4HmVFK1722/r7n+JJb+Kls7yeSz0LTILS6t/s9zYA3DQzruDAktKXDAhSCrD7o9Tl8PjfVdOs7i28OEaBFcXCzyf2ZPNGxwm0JvaRmK8k4JPLH2AF8G3U2sGxtZw4aAXEbm3mZyhxjdHGjuh5HUY7gkEEgUeEdTntdT0+DUHdImHnQPHsxIrnAljDchSvTGGPXpWP1unL3aXvO17baX8y/ZyWr0Rai8fyreald3Wg6VeXGqRCG6lnNyDIuF3fdmXligYnrknkDiqlj4rjsfD95pK+H9LlivGDyyyNc7yVLFMYmAG3cccc980ujLba5c6tYtZwxNdRS3VqyqAYHjVpNgP90qGUjp909qh023g1LwvqkJhjW609VvIp1XDMhZY3Rj3HzKw9MN611dNe39fdqZ9bLv/AF95FdX1tf8Ahizglfy73TmaKMbTiaF2L9R0KsW69Q3tzkUUUxGnN4h1Ga5t7v7Q0V9ApX7bEzJNIMYG5geSBxnrg4JOBitfapqGqOj6nfXN4yDCtcTNIVHoMk4qrRWUaNOLTjFaFOUn1Nfw3qGm6Xfy3eq2v21VgkWK1eFXSR2UqNxJG3BIOQCeO3WsiiitSQq5LqtxJpsNgm2G2jbeUiGPMf8AvuerHBwOwHQDJzToqZRjK11sNNrY0LzX9Y1C3+z3+rX11CSD5c9y7rkdOCcVVtIoZryKO5nFtCzgSTFS2xe5wOT9KhoohCNNWgrIG3LdnSHXdNufG8Wp3sDnTbYxrDatAs2+KJQqRupYDlVGTzgk8GsG9nS5v7ieGBbeOWVnWFOkYJyFHsOlQ0VQgooooAKKKKACiiigAooooAKKKKANKfxBqFzYx2t08E6RoI0eW1ieRVByFEhXfgemenHSpbvxPqd9Bbw3Rs3itWDQoLCBQnOcDCdCeo6HuKyKKrmfcnlj2Nc+KtZ+0Ws0d2sBsyxgS3gjiRN33vkVQpz3yOe9Ub6/m1CVZJ0t0ZV2gW9tHCPxCKAT71Wra8KR2UutiPULZrgNFJsUOoGRGx5BU59umDg89KqKc5KLYmlFXSKuka5f6HM8umPDHI42l3t45CBgggF1OMgnOOvemDWL1Yb6KOSOOK/2/aI44URW2tuGABhef7uK09N0zR723u7+5eW1s4XjiWOS4JbLAnJdIW/u8DYOvXjnRsvDWiT2/nG4vLhGMhjkiZYwyrKkY4ZSRnzAfbHTnjWNCc2kn079DOU4Rd2jjq1JtTiu/DdvYXKP9pspG+zSqAQY3OWRvo3II/vMD2rV/wCEf0wNHak3huZbe4m87eojj8tpAMjbkgiPnkY9+gh1i+u08G+H7JbqZbR4ZZGtxIfLZhO+GK9CfesZwcUr9TWMk2ZR1m+MNvH5qA2pUwyiFBIm3oPMA3YHpmnS67fSyNJm3jd42jcw2sUe5W652qM/U81c1t1/szRZbZ7hI/Ify0ldWMeJG6Mqr355yfepvFl5c6ha6Dc39xNc3EmnfPLM5d2/fyjknk8Vc5Ti/i6/p/wBRUX0/q5Db+J7sC9e8dZ5pomWPfbxuoZpUdiykYI+U9jg4p2la1A95qb69PcgX9oYDLbwLIyHchGELIMAJjAIxxVbw/pVtq97JDeXv2NFj3B90IycgY/eyxjv2JPtUWt6dBpeptbWt19qjCgiTMRznt+6kkX/AMe/KolOTSUn/Wo4xSd1/WwWWs3WlrNFYNCYpchjNaROzrxwdytxwDjOM1asL/T7Xw/qsckly1/fRrEsS26iJQJUfdv35/hIwF/GpdKXSj4X1CS9sZ5popYcvHOqEA7vu5jbaPXrnjpT10bR4dDhub++aG4uoXmiAZjjBYBdoiIbJXk71xnpxzo6cnFNyvZf0iOZKW3UyZNWvZdHg0qSbNlBK00cWxRtdgATnGT0HU1fuvGOt3j20s9zEbm2dJI7xbSJLncgwpacKJGwMfeY9B6VrXvhfSrewneJ7wzxq+C0ibSVSN+m3P8Ay0x17Z9qoaxo2m2sGoNp/wBrVrC8W2Zrh1ZZs7ugCjBG31ORzx0qpYecHqEakZLQhuvGWuXcySPcwxbElRY7a0hgj/eoUkOxFClmU4LYz054FVoPEeq211ptxDdbZdLj8u0PlqfLXczFSMYYEu2d2cg46cVq+MtRmn8eXY1Oe6uoLa4ZI4/PwY17KhYMFGe2MVBqd5e6Z48uZ7K+uYrhbkj7QkmyQg9eUA6j0ArGEeaKfn/wxcpNOzGW3jXW7Oa5ktJLOH7SY2kjTTrcRhkzsdY/L2owycMoB560+18c67aXOoXEctnJNqTu93JcabbTNKWILAl4z8pIB2jjPao/Elpc3vjrWorO3luJPtlw5SJC5wHYk4HYDnNWtI07w/F4XXV/EEWpz79QNp5djcRxbUCKxfLI2SM/d4z6jHOad4839a6FvR2/rQzE8SarE8LxXKoYbaW1jCwoAsUpcuoGMc+Y/uM8YwMOfxNqTaK2lKbSG1dFjk8ixgiklVSCA8ioHcZAPzE5IBNdInhXwtbeFLW+1bWpLe61C2muLU5k42u6InlrA6sSUGT5ybd3Tj5ku/CmhDSb1LQ6kt/ZaNbanJcTSoYC0ixExbAgIz5vDbuvGD1LfXy/4P5a/wBMFdv+vJfjoc1qmpxapp9gZUdb61iFs7gDbLEv3D6hgPl9CAvvmhbXElpdR3EBCyxsGQlQ2D64PFdtrA1DxNpfgSC5luNRu7tJYF82c73/ANJZQu9s444BOQPSr918PNFuL7RDo97cNa38t2kwSRp2P2dA7CNnghyzcqBtIz3PICkk077a/wDBEtdF/X9WPOJppLiZ5p5HllkYs7uxLMT1JJ6mmV2Hh/RPDniHUb6fF5pmmadZfaJkub3zXkbzFTh47clV+cE/um6ckZyNvw94f0W21jUNW0ubTtW0i3NvBGNTmjiRnkIMqhrgRhyqLIAdqnJVgBTStoDfU4jSdUh0qxv3jSRr+4hNtE/ASKN+JG9SxX5QOmGJ9KLfVIbPw3dWVskn2u+dVuJWwFWFSGCL3JLYJJx90Dua6zSoL3QZvHHh77ZM1nDp0zeUsp8qUiWMJJtBwSVIwfQ1naVfXc3wp8Q2ct1M9rBdWbQwNISkZZpNxVegJxzjrSbvr5L8x2t97/I5Cit/USLDwfpNtbqV/tFXu7mTHMhWRo0TPou0nHq/sKh1LxRfatZR2t5HCYkkjkwoYFikSxDJz3VRn3qJympJRV1112/zGkrasxqK6W78P2J1SzQztpwu0MklpM0ZktuMjl3Rdp7bmVsHoeC0dyF8KX4fSrxLw3FtLC5cwsFV1KH/AFU0gzg5GSOexrBYunO0YfE1dL/g7F+ya1exz1FaV7cah4n1qe7Fs091MN7x28bNgKvJxycADJNZtdMXJxTkrMzdr6BRWxaeJ76y0VtLiWEwNHNGSyktiXZu74/5ZjHHc0+40y2s/DUF3Gn217tgrXSNiO1IOfL28HeR3YAYztDfeGPtnF2qK13Za7/lbTW33XK5U1dMxKK6LU9Cs9Is1vbPVPtE0bqVj32p79f3dw7f+O/lUOpeLdT1K+tbtzHDPazyXETQqRtd5PMPUnjPQfzpU66rNOlrHq9rfK2o5Q5U+bfoYdFdRqumWTeOraL7JdfZL9YLlrTT0BmQSxq7RxqeMgsQB6YrnLqMRXc0apIio7KFlGHXB6MPX1rpMyKiiigAooooAKKKKACiiigAooooAKs3umX+msg1GyuLQyDcgniZNw9Rkc12eraBotl4WSS203ULqSSzjlTUreBmi80n5g0nmFQM5XbsBHHJput6Pdx6H4QXUdLvzDGrRXEaQMH+aY/IMjhiOgPWtXTadvO35mCrJ2aOFp8U0lvMksEjRSIdyujEMp9QR0r0SbwlpR8U6Uk1vFZ2F4krx2hWaG5ZlGVjkSVzyW+UFWAbnBHBrl/FtnZWd3bLY6Xf6azRZliu7doQxyfmRWd2x9WPIqXFx1KjUjN2RStL/XLnUXmsLvUJb10O94ZHaRlAyckckAD9KSzk1rUbgw6e1/dzEM5jgLuxywYnA5+8AT7gVu/Duxkv9bnRbGaaP7PIGuIWlRoTsbaN0bAfMRjDZz0qfw6lrZeEfFEOpWF6lxFHCtwnniJiPNGFAMZKkHrnOfQVa5tLvo2TKSTaS6pfec/fa3qL2MWmSTXUEcCNHPC0rASP5jMSy+uTjnPSpLm+ivvDFpANOuvO00GM3azAxBXdmAZNmQckgHf26VjHG47QQM8AnNdDqjG18JeH4Yox9nnEt1MM8SyiVkw2PRFXHpuPrWcpOWsmbJJbGXcazqV7EsN/qF5cwBgTFJcMw49jkZ/Cp9c1S21L7DHYWk1rb2dt5CLNOJnb52fJYIo6v6dq39St4dSvNGefTI7XTp47eN7+Pzdq8YMYZmKjGCOeeOTT59I0uO5bzdFu7doraeUx3EMkEcmwDbjMrk85zhgMEdOtdMsPOTd3s3+H/AMY1Iq1lucTVmw02+1W4NvpdlcXswUsY7eJpGx64AJxzXZ3ugacl5djT9Fa5eCKYR2ySSsXZJkQMcHJ4Y5Axx6daprawWdz4gitohB/xJ1aWAMW8mQvCWTJyeDnqSR0rKpRlTjzP+t/8i4VFN2X9bf5nOWUuqWMs76c93byRKRO0BZCi5wd2Ogzjr3qxB/wkCaFPcW39prpJYrNJH5ggLHAIYj5cnIHPqKveHNPur7SNWW206ebNuds8IlyWDJ+7+U7W45wQT3qHRFK6H4kVgQwsowQR0/0iKlJSglruv1f+Q42k36mWdSvWyHu7hgc7gZWOcgA9+4UD8B6VY1nXLzWr6Se6nnaIys8UMkxdYgT91c9Ow4A6VE+k3sWjwapLDtsriVoY5dw+ZlAJGM54z1xiu91LwnYweJ9P0yXQfsXh6S7iij8RB5j9sQrkHzWYwfP1+VRt/A5XPJ6X/r+v+AOyWpx+ta7Hfa82raTDdadcyMXkb7XvIY9SpVFKjHbn61BFqzXOpQ3GvyX2pRxDhfte1/UYZlfAz2xXep4Z01bmzl8Q+FP7GuAL5n0sXE8ZniitmkST94zOvzgjcDtbHA4NS+G/wCyrLxj4aurPQrKJtZ0qZvs/nTlEmJniAjzJu+faq4Yt97jBxUKTirL+t/8inFbv+tbHnt7rdzPr99qljJNYveSyORFKQQrkkruGMjBx71Xgj1C7sZobZLme1ts3EqRhmSLopkYDgdhuPsK9A8M+FRqGrapLrXhEWotTAjaXHaXcksO/P7zY1zGyphcs7uQMjA9J9P8KXAv/Hmk6Jod9dW1qtxBbXdubguWSVAsJ2MEfI+bayk8Z7VOkY/J/gPVv5r8Tz618QazY6ZLp1lq19b2M+fNtYbl0ikyMHcgODkcHIq7r3i/VNctrayku7uPTra2ghSxa6Z4Q0USpvCcAEkE9ONx5PWum03RNEfR9PsbvRFN9daLfXk1488qyRywtPsCoGCj/VAEEHPsck19Q8Nw/wDCt4dUtNCayMMMbXF5qMFzFJcMzAZt33mGRTnptVgBkbsE05af15tfoCvf7/0ZgXHiXxXqNnCLvWtZurZZlEQlupXQSryu3JxuHBGORTdW1PxRJdW8+uXurtPFKzW8l5LKWSRSAxUschgVAOOQQPSp/FDvbNpFrAPLtoNPglhA5DPIgd39yXJH/AQO1Zuo6zqOsSIb+4MzLI7r8qrhnbcx4A6nms5e0U1y2trfv8gXLy672Vi1d+IvE0euLeX2sasmq2qmJZ5rqQTxDnKhidyjk8e5qKW717xC0nn3GpaofMEkm95JvnOEDHOeT8qg/QVq6jHYXXjzV/8AhIC9ohmkYLJOUZW3cKSkcuePQY9/WhcagmialKPDN5+4kRNz7zLkq4cDLxRnhlU/d7dTXNGvOpFKEdWk7/Z6Pc1lBRbu9n8ySDxN4v02OdrbW9btEWRYpjHdzIA4Xaqtg9QqYAPZcdqjh8TeKLLShDb63q9vYTM6hEu5VikJ5cYBwT82T/vc9at+F7iW/wBQ1aC9cvb3tjcS3RPQMiNIr49Q6j8yO9R6ITceFPEFrcH/AEaGGO6jJ6JOJVQY92V2H4e1dmtte39fkZaX07mc2qmXQE0y4h8zyJTJbTbsGIN99cd1OAe2CD6mqCsyOGQlWU5BBwQaSimIdJI8sjSSuzu5LMzHJYnqSabRRQBpaLrlxoN1LdWMcX2pomjjnfduh3AqSoBAzgkfMCPbNZtFFABT0nljikijldI5QBIisQHAOQCO/IzTKKGk9wCprSSCK8iku4DcQq4LxB9m8em7BxmoaKYGxH4lul8UNr0sME135nmxq29UiYfd2hWBwuAACSMDBBrLubiW7upbm5ffNM5kkYjG5ick/nUdFIAooooAKKKKACiiigAooooAKKKKACiiigAp8UMs8nlwRvI+CdqKScAZPA9hTK2vCd+LDXULtbokqPGXnjRgpKMF5YHaMkZPHHXirhFSkkyZNpNoxaK67SmgSS+bUItOm1HdHsRJrSKLy8HdtLI0Wc7cgAN79auWV3o0duSbTS4WZpWMcpjmKHz4wo3HqApfHYjnkDjeOHUn8RnKrbocLW1JDqcPg+M3CWp06eYy25kuI/NRslGKJu34O3B+XHyj0rdljsoLOJnh0tdPe2uS7HyjPI3mSiPZ/HwQuCvHqcDjE1r/AJFvw7/17Tf+j3rGpDksu5pGXM35GXNYXNvFbSzRhEul3wsXGGGSuevHIPXFS6npF5o8sUd8sOZo/NjaG4jmR1yRkMjEdVI69q09fts6Vp05bTfOWNkuBaSwZ3bztysZ5+XHOPrUfiH/AJBfh7/sG/8AteWipHkdl3/RhB8y/ruZVveSW0F1FGFK3MQifcOQAytx75UVZ0fV20iW4P2S3vI7mAwSw3G8Kylg3VGUg5Ud6l8P3GkW97I2uwefAY8IvkPLhsjnCzRHpn+I/TuItbm06fU2fRofJtdownlNHz34aWQ/+PfgKht6DSKZjklWSeOEiJWG4oCVTOcDJ+hxk9qvWusm00W70+Kxtd14Akt0TJ5u0MrBQN+zGVH8OfetLQL+X+wb+xgbT1nLxyRi7jgAcAtu+aQYJGRgE8c471Zgk02Pwynl2dpcyGGT7QXureJ1ky2CFZfMOBtI2MAcYx1zt7JON0+n9f8ADmfO09upyVFd1fz6M2n3EMMelg7ZAhjSPfxHEVweuSxf9R0GKqeKEt4E1CGWHTYXW9C2cdmIt6xjdu37OR/Dw3OegAFXPD8nW4o1Oa2hz+p6Le6PeLa36wrO3/LOK5jlKn0bYx2n2ODQui3p1h9LdYYbtGKss9zHEoI7b2YL+vNa3iMSn4i6j9n+z+Z9qfb9p8vy/wAfM+X86ra9bxQeK3a1NqbeWcNF9lljdQufRCQv04rGEOaKl3ZcpWdjJvLSawvZ7S7Ty54JGjkTIO1gcEZHB59Khro9a07+0/H2twfa7S023VzJ5l3L5aHazHaD/ePQDuasaRrVvong1J7e00m61FtTIdb20iuHMIjU7drg4Ut3GD1wRzWMXeN35fjoaNe9Zef+ZylFelWV1oCeAY3ttI028lktpzerLqFpbyxTFn27VljM7BVMZXypADjBGd2ZdbhsbTwzMl9a6FBayaHZNZiAW/22S7aOJi52nzVBG/O7Ckc4JOTT0v8A13/y07gld/15f569jjdds9W0/R9Lt9WjtXgZHksriG4jnJjLfMm6NiMBsnB5BJ9TWFXoV7pER0nwZb3mraRFHbSNFePHf21ybcSXBYM0au24bTk8EdjitrVk8KS6t4de7TR4ZPtF2k6pc2ssfCL9nMxtY44whkPPB4yC3BAP82Ja6f1/Wh5HU9lYXmpXH2fTrWe7m2l/LgjLttAyTgc4A5Nd9oZhXxNct4qi0Ga9Gnk2EdpNp0Vuz+YM7nVHtw+zfjzFPbodpq3Dqmg6PqOp6zI40W7ea2t4LfS5LbUD8m2WSQiN44wrFEHyYUEsoHXB/X6AcbpFpq0/hvV30qO1NuqBr1/tEaziJSDgIzbim4qSVXqAM9qFtNWbwNJPbx2o0pbpWuXiuIzM0hyqCRN28KPn2/KByTzXVado9pFq/i7+y9S0pbC7sZIrEz6pbQlvMaOREw0g5C8E9AVIzkVmaLpch+HfiCJr3S0luJrdoopNUtkdxE0m/CmQHuMcfNnjNJv8l+f9Mdvzf5HIpY3D6fJfLH/o0TrG0hIA3EEhRnqcAnjpVq+0DUtNtBc3tuI4WdUDCRGyWQSLwCeqsD/9er2s7v8AhEPDvk4+zbJ9+3/nv5p3Z99nlfhisea+u7mMR3F1NKgIIV5CwBChQcH0UAfQAVEvac65bW6/8Aa5bai3thc6fLHHeR+W8kSTKNwOUYblPHqDRZWFzqMzxWcfmOkTzMNwXCIpZjyewBOOtbF1cWQ1+xl1QQXFqtjAjrAWnHywqoBAeM7sgZG4YPrjmvq99pwuY38Oq9ovlskuyJ4SwPBHM0uQQSDyPpXPGvUkox5feave3u/mXyRWt9NPUz9Q0+50u+ks76Pyp4iA6bg2MjI5BI6Gq9amk6Ze+KNaNsl0hupI3lMt3Kfm2IWILc84XvWXXVHm5UpbmbtfQ0bfQNSutNN/Bbh7YJI5fzEHEe3fwTnjev1zxWdU6X13HbmCO6mSEhgY1kIXDY3DHTnaM+uB6VtSXnhs6II47PF95QHmfZJB8/GTu+1EevOz8BWDqVKb99Xu9LLZeepajGS009TARGkkVE5ZiAMnHNadz4a1azvLa0ubURzXUzwRKZk+Z1fYwznA+bjmrerXvh6TT8aRa+TdBgQ4tZI8Dv8AM11IP/HfyrGuL26vGBu7machmYGSQtgsck89yeT6minUqVWpJWj1TWvy1CUVFNN3fS36kUsUkEzwzo0ckbFXRxgqRwQR2NNrtNSjeb4oWMSR2Ut9IbVbhL5S0DXJjQOJAOSN+d3vmuU1KF7bVruCYRLJFO6MIfuAhiDt9vSunsZ/195WooooAKKKKACiiigAooooAKKKKACtPVtDl0m1sbk3VvdQX0bSQvBv6A4OQyqRzXU6t4os7jwslhps2nx2zWccL2lwlz5scin5mUDMQOfm3cE5Oeaqaleacun+G1s9XsLmfSyVlR4Z9hJl3AkGMZUDqOvoDWrjFO1+v+ZgqknZ2OOor0ebxPob+KdK1O7vpbuVUl88CSea2t5CMK8YkCyKN3zEDOOMHIrl/Furtq93bPJPYXLRRbPOtBcEsMnh2n+ZiPXniplFJblRm5O1rGXpth/aN35H2q1tPkZ/MupNicDOM+p6AetTaVos2qxXcwngtbazjDzzzltqAnaBhQzEknsK1/AmqQaVqs819qy2Nq8LxyRESnziyMF4RSDgnPPrxmpNG1+HRvDuu6f9osppJFiFq32JZFmIkBbJePJGOQH6dhmnaPXsKUp3aXdHNXM8knlwvMs0dspiiZVwNu4txkA8lieeea05JtTm8Hx/aHtRp0ExitxJbx+a7ZLsEfbvwN2T82PmHrWKTuYk45OeBiuh1Rnk8JeH7q1c+XaiW3k2ceVN5rSAn0JVlwe+0+lQ9dzb0MWe2nsZYvPQKzosqA4YFWGQfy7GptT1e81iWKS+aHMMflRrDbxwoi5JwFRQOrE9O9dBc+IEu7nSbu+1WS7tofJ+0afI0jNuUYZyCNjZxnrk5qzP4mQXLO9/aSsttOsM9v8AaWkV2A2gtNkjkZGDgHJrp9jTbfvaXdv89zFTlpocTWho+kNq8twPtdvZx20BnlmuN+1VDBeiKxJyw7V2M+uxalPqM9hqiwNHbyhLl0cCJDcR7cYUkcdMDIJ7dazlvYr+58QTQSGfGjqjzlSPOdXhDPg88kd+fWoqU4whzJ3/AKfn5FU5ucrNW1/y/wAzmIbMTLdMt1bqLdN43uV83kDCAjJPOcccVZtdGN3ot3qEV9a7rMB5bUiTzdpZVDA7NmMsP4s+1XdAuoo9L1K2utYjtIrqExrbyCUqXypDkIhHQEZ603RBjQ/EgBDAWUfI7/6RFWc4pJW7fjd/8AqLbevcwgcHIqW5uZbu6lubht80rl3bAGWJyTgVO9tZJo8Fyl/5l48rLJZ+Sw8tABht/Q554HTFd7qXifTZfE+n376/9u8NR3cUkfh4pMPsaBcAeSy+SdnT5WO78TU67f1/X9Ow/M4TVdZvNauRcagYXmxgvFbRxFvdtijcfc5NSeH49Rl1mJNGghnu9rsiTxRSLhVLMcSArwAT+HHNd6njKCyubOTUPE/9vajbC+eLUTDK4iWS2ZIosyoGOZMHbt2LnrycRab8Qmh8R+HL+4169WX+zHtNVut8u8uXm2GQjmTaHjbjdjHHIxS22/rf+vmNrv8A1qed3l3Nf3s93dv5k88jSSPgDcxOScDgc+lTWGnfb4L2X7ZaW32SDztlxLsab5gNkYx8zc5x6A133hnxLBpWrapeap4yN7qEhgVLyS51ERTxDO8Zj2Ss6/KFD4Trz0IW21vSZtS8apH4nt9O0nV2uEtLOSO6Ebs0iskpSOJlA2gjn5h6Utlp2f8AwB7vXuv+CeaVYvb+51GdJryTzJEijhU7QMIiBFHHoqgfhXd6b4zgstH0/Rn1Zv7Oj0W+t7qBEfy5J3acxbht+b70ZBPC57HNV9Q120vPhvDp11rq+dbQxra6fp0t0sbncC32iKRBEWA3HfGw56hs5Dlpt/WrX9eolv8A15f18jkn0meKys7mZ44xeuRCjE7ioON+AOFzkZ7kHA4qxrnh260BoxdzW8pkkmjHksTgxvsbOQOCRx/SrPioGb+yb2Jt9rNp0EcRA4Vo0CSJ9Q4J/wCBA96zNKvIrDUo7m4g+0RpnMeIznII/wCWiOv5qfw61jUVRS5oPa+nftr0Kjy2s+tvl3Kdaei6Fca48y2s0EZh8st5zEZ3yLGMYB7uPwzWmfE+nHU1uRo/7tYjGY9lnySQc/8AHrt7f3c+46HH1i/h1LUDcW1t9mjKgeXiIdO/7uNF/wDHaxU8RU93l5fO6fysXywWt7kh0O58rUnjeGU6a+2dEY7tu7bvUY5UNgE9RuHFQjS520U6pG0bwJP5Eqq3zRMRlSw9Gw2D/snpWr4QBhuNSvph/odtp863BPRvMQxon1LsuPoT2o0QG38KeILq4H+jTQx2sYPR5zKrjHuqox/H3rr1S17f1/XmZ6N6dzFS+uE0+SxWT/RpXWRoyARuAIDDPQ4JHHWoKKKYgooooAnt767tIpo7W5mhjuE2TJHIVEi+jAdR7GoKKKACiiigAqW0upbK8iurZgs0Lh0YqGwR0ODkVFRQBZh1K+tryS7t724iuZd2+ZJWV33feywOTnv61WoooAKKKKACiiigAooooAKKKKACiiigAooooAKvaTo17rd0YNPhaRlQsxCMQoAJ5wDjOMD3qjV/Rb6PTtWiuJ1ZogHR9gBYBlKkjPUjOauHK5JS2JlezsNXRdUe8e0TTbxrmNdzwiBi6j1K4yBzSQaPqd0u62067mXO3McDMM5xjgeorU03VtO063u7NJJWhleORLiTT4ZWyoIwYnYqPvHBDZ/Or0Pi+FYSLh7qaUmUtII1TeXmjfO0NgZVDkDuQK3jTpN+9KxnKU1sjnBpWom1e5FhdGBBlpfJbaoyRknGByCPwq9c2MNh4YtLgajdedqIMhtFhAiKo7KCz78k5BIGzv1rYu9XtLaCxvmkumle0ufItvLHl/vJZVyzbuOvICnOBz6UtYsbt/Bvh+9W1mNokMsb3AjJjVjO+FLdAfasasVCyRcG3e5l6hpTabHZm5+0RyXEe+SOW2aMx/MRxuxu45yOOcVJrml22m/YZLC7mure8tvPRpoBC6/OyYKh2HVPXvUup3Gm3Wlafa2E15LPaq0YWS2VA+5y3USMc84xjmrPiyzudPtdBtr+2mtriPTvnimjKOv7+U8g8jiiqknp3/Rjg21r/Wpz6SyRq6xuyrIu1wpwGGQcH1GQD+FT2GpX2lXBuNLvbiymKlTJbytG2PTIIOOKueH/ABBc+Hb2S5s03PJH5ZH2iaHjIPWKRCenQnHtUWt6zPr2ptfXS7ZGUKR50svT/ald2/Wo1KJbTw/q+q2E+o21pcXKK4BKxu7SE5yRgHOMc/UUkT6//YM0MLal/ZAfM0aGT7OGBH3h93Ocdfak0y8s0029sdQeeKO4MbrLBEJCpQngqWXghj37VoR+IYU0SG3ile2uLeCSBSthDL5gYsf9Yx3pkMQQM+o61ty0+X5fiZc07/MyH0fU47czyaddpCBuMjQMFAzjOcetNudLv7KNJL2yubdHYqrywsgJHUAkV0l34stLq3nhVLn97vA3AY5iiQZ57FG/AiovFGoW0d5q9nBLc3E9zf75WmQKsewsAq4YluuMnHA6emk6VNaxdxRnN2uihrOhQ2PiA6Rpk91fzxuY5P8ARNh3DrsCuxYY+h9qgbTrK38QyWF7d3MdukhTzktP3me37t2XHPqeK1fGdhJa+Or19WhurS2uJmkjl+z5Lr2ZQxUMM981XvFXxD4t83QIb68kuJPMMP2b51x1wFZsgAZzxWFNKUU33Lk2mZer2H9la1e6f5nm/ZZ3h8zbt3bWIzjJx0qXTfD2ta0rNo+kX9+qkhja2zygEYz90H1H5itPWv7N/wCE/wBc/tr7WLf7Vc7fsgXf5m5tud3G3OM98VVj13yPB8WlW8lxFcx6l9tDo21RiMKpBBzuBB7cZ61jF3hf0/r9TSS963qVIdC1e40ubUrfS72WwgJWW6S3dooyMZDOBgdR1Pelm8P6zb6YNSuNIvorE7cXT2zrEdwBX5yMcggjnnIrrIPHUI8K2tst1LZanaWs9tvXSLa6+0CRnYn7RIwli3eYytt3eo6kVa8R63YaZZyRC4v7rUL7w9YWX2eSJVt7eMxQyFg+8lj8uQuxQCxOTjmndX/rv/Xl1BWb/ruv8/n0Oa1nRVs9K0VtI1C8v7fVQ8sdvJbeUyyq/lkBFdwxJHB6kY4rOv8Aw/rOl3cNrqekX1ncXGPJhuLZ43k5x8qkAnnjiuludY8JNY+GoPM1S+TSJMXEE1lHCtxG0xkcBhMxBwcYxz6itaf4h6JFd6IbOC5kisLi8aZ4tPtrAhJ41jBjSIld6AEgk5JA5HY/zf8AwBL+v6/rc4mTwt4gh1SLTJdC1JL+ZPMjtGs5BK68/MExkjg847Gp9H8Janq+vS6OVXT7uEfvVvg0XltuCqpG0kEsyqOOrDOBzWp4f13QvDeo30drcXl3Z39l5D3NzpMDvC/mK4xA8jxyL8gBywPOR05uTePLOGK9YWqa3d3M1uqTXtmLJI4IU+RVS2lG0hscA4wi9+gBh6No8ep6JrMcmpXVtcadCbz7H9nDRS7CE5beCrDeR9w8Z5pIdKhvfA11qSandGXTZ41ayeAeUPNJG5H3nn5ORsHbk1uweIvCsmr+I764l1S0GtW7RCG3sI5FhaQo7tkzrwHVgB6YOQeKztL1Hw5beDdW0y6vtUF1fyROvl6fGyJ5RfaCTOD824Z4+X/apO/4L776/gPT8fw/q5iNpRi0BNTuJvL8+Ux20O3JlC/fbPZRkDvkk+hqxquj2Nhp6z2msQ3kjSIphRQCA0SuTwx6MxQ+4/Cp9RAv/B+k3Nuxb+zle0uY88xlpGkR8ejbiM+qe4rGs7l7K9huYxl4XDqNzLyDnqpBH1BB96zqRm5Xi9ummvb0/wCCOLSWqIauaZZwX1xJHdXiWipBJKruAQzKhYJyRyxGB7noa2p/HWo3F3a3DxYa2ZmQfbrw5ypHUzEjr/CR75HFZuu6/c6/NFLdrtMSlR/pE0vU+sruR+GKwjUxE/dcOW/W6dvl1L5YLW9/1K+rWcGn6rNa2l4l7DGQFuEAAfgHsT6469qp1r+G9O07UL+X+27r7LYwwSO8iSor7gp2BVbl8tgYUE89utZFdUU4pJu7tuZuzd0bFpo9jcaK15LrEME4jmYWrKNxKbNo+9n5t5xx/CevarJpyp4fg1Lz8tLcyQeTs6bFRt27P+30xVGr7XkJ0G3tFeczR3UkpQhfLAZUGQR8275ee2AMd6wcasZL3r3fZba6fkWnFrYpRKrzIrtsVmALY6D1ra1LRdMsL61iTXI7mCWeSOWaGIN5SLJtD4DHII+YDj8etSav4xvtZ042dzHtjLBs/bLqTp/sySsv6Vi2lpPfXkVraRmSaZwiIO5NOn7ao1Kfu26aO/zFLkimlr59izeaLe2muyaR5LT3ayeWqQKX80n7pUDkgggj1BFUXRo3ZJFKspwysMEH0rsJpbW/+I1osWo+RaWSwW8l/DdJCxWFFRpUdjjPykrjJIxgGuWv/JOpXP2WaSeDzn8uWT7zrk4Y+5HNb9iCvRRRTAKKKKACiiigDR0C3srzXbS01JJ2guJViJt5FRlLEANypBxnOOM+oqpd27Wl7PbOctDI0ZOMZIOKu+HLWO78RWSXD2yQLMjzNdSpHHsDAtksQDxnjknsDUOsX8mp6tcXUs0kwZyI2kJJCA/KBnoAMADtQ+nz/r+v0BdSbTfD2p6vD5thbq6eZ5Sl5kj8x8Z2qGI3NjsuTyPWrcGkWU/g3UNRZLmK+sZ4omDSKY33k/w7cgjH941Po/jCXTdBGlP9vjjSczJLp98bZ+Rgqx2sGHAI4GKjtvENhD4dvtMn0+8mkvpFlluDeqPnUkqcGM+vOTz6itHypaf1t/wTH943t1M650K/s9PivLpIYo5kWSNGuIxIyt0YR7t+D6496kv/AA5qumWhub22CRqyo+2VHaJiMhXVSShI7MBWkfF4HhhdJ+yzXDoUaKa9uFmFuVxnyhsDIDtAxuIA+uaTxJ4vk8RRv5h1GJ5XV5IW1AyWwIHO2Ir8vPI+Y4okoa2YRdS6ujnYIjPcRxA4Mjhc+mTitHxJZ2OneILuw0xZ/KtJWgLzyq5kZWILDCrgHHTnHqaraXfTabqlvd288kDxODvjYggdCOPUZGO4NW/FNtBb+Jr42LWzWk0zy232aVHQRsxKj5SdvH8JwR3ArN9Pn+n9f8MbLr8v1MmiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA3LzTbaHwXZX0ItpZpbp0knjll3r8iny2RkCjGc7lJzn2p974WfStSsLPULyEzXTx74IklDoj4+bcyBGHbKlhmoX8Qq/hxNH/sewWNHMgnDTeZ5hABf/AFm3JAHG3HtUk3iqZtPtrG0sLSztre5W6EcTTOGkUYB/eSNj324z36DGvuc13tp+l/6/Vmfvctl5/wDAKv8AZHn+KJNJtZCv+kvBGzo7nhiBkRqWJ47Ka1ZPAGrQ69Hpcjxq8lqbsSGKYfuwSCfLMfm5yCMbM9+nNVx4s8vWBqVtoum285MvnbDOyzCRSrBg0pxwx+7tPvUdx4n+13lpLcaPp7RWVv8AZ4LZTMiIN5YHKyBiwLHkt9cnmpioqKT3/wCAU73dixonhvT9S/tYT65aoLK2MsUirNtchlG8/uidnzYxgNnHGK5+4jWG4kjjnjuEViBLGGCuPUbgDj6gVsv4tvJtfvNUube2uGvYfInt5N5jdMAYJDbyflU7t2cjJJrGuJVmuJJI4I7dGYkRRliqD0G4k4+pNKVtLdhrrcvQaBeXNiLuObTxGVLbZNSt0kwP+mbOGzx0xk1nxqHkVWdYwxALtnC+5wCfyFaEHiTXLWxFla61qENoFKi3junWMA9RtBxg5NZtT1H0On1jwpa2t1pNtp2qwTzahDAdjCTJaQ43g+WAE9j83tUa+Crx79bKLUNOe5zKskSzNuhMa7iGG3PIHBGRngkGqz+J55Dpkj2Vo1zpojWG5xIHZYzlVYb9pHvgH3qGy8Q3dh4ik1mKOFp5HkZ43U7DvBDDg5x8x75rR8l9PP8A4BilUSL9h4I1XUVtGtzEyXNq13uAd/LQNt5VVLEk9AoP86gufCl3Y68+lX91Z2ciwmcTXEhjjddu4AEjIJ6AEA544qw3ja9ZY4vsNiLRLVrM2gR/LeItuwTu3ZB5BBB45J5qHRdY0my1qXUL/S4WiWFlisEhMsTsVK8tI5K4J3Z+bkdBSny293z/AF/4A4c9/e/r+tTBoooqDUKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKANPw5cra+IrJpIIbiJpkSWKa3E4dCwDDaQecdMc+nNQ6zYf2brFza5Qqkh27JA+FzwCQTg46g8g8EA1JoFxZWeu2l3qTzrBbyrKRbxq7MVIIXlgBnGM849DVO6nN1eTXBXaZZGcgdsnND6fP8Ar+v1BdSKiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKANrwpHZS62I9QtmuA0UmxQ6gZEbHkFTn26YODz0qbTdM0e9t7u/uXltbOF44ljkuCWywJyXSFv7vA2Dr145xbJbpr6FdOExui4EIgB3lu23HOfpVj+19Wgv5bj+0L2O7YbJJfPcSEDsTnPbp7V0QqRSSkvwMpRbbszo7Lw1ok9v5xuLy4RjIY5ImWMMqypGOGUkZ8wH2x054r/APCP6YGjtSbw3MtvcTedvURx+W0gGRtyQRHzyMe/Qc//AGlfc/6bcckk/vW5JYMe/cgH6gGrV1r99c6Zb2IubhII4yssYnYrMxkZ9xXpn5h1z0qnUpOKXLrb7xcs779TQ1i+u08G+H7JbqZbR4ZZGtxIfLZhO+GK9CfeoNbdf7M0WW2e4SPyH8tJXVjHiRujKq9+ecn3qC71W0u/D9hZNZzLd2SsiXAuB5bKzs5zHszn5sZ3fhT9Vm8Qwxw2/iF9VWGQCRIbxpFDr6qH4/HFYxaUZLuy5K7Ra8WXlzqFroNzf3E1zcSad88szl3b9/KOSeTxVLw/pVtq97JDeXv2NFj3B90IycgY/eyxjv2JPtSa5qltqX2GOwtJrW3s7byEWacTO3zs+SwRR1f07Vl1n1fqy3svkaGt6dBpeptbWt19qjCgiTMRznt+6kkX/wAe/KrGi+J77QoGislhKtMJv3ik4YI6diOMSH8hWPRWdSlCrHkqK6KjJxlzR0Z0FgY28C6usTXEbpNA0o3oY5cswX5dm5SOejc56VoXmo2tn8PbGDTk1G1+2SziQLfAJIw8sHzFEY3jHQZGPU1z1tr2r2dn9ktNVvoLbkeTFcOqc9flBxzVNp5XgjheV2ijJKIWJVScZIHbOB+VcbwjnU5p7c3Nu+1tfnZ9exqqtlpva343GVt+LCLfXZdMhUpbad/o0SYxnH3nPuzZYn3A6AViVe1PUjqjQTTRbblIljllDf67aMKxHY7QAT3xnrnPTKMnVjLor/fpr+a+ZmmuVr+v6/yG6Zqk+k3Ek1qELSQSQMHBI2uhU9D1wePejVtUn1nVZtQuwgmmILBAQOAB3J9Kp0Vfsoc/tLe9tfyJ5ny8vQ6Tw7oWnalpGq3F7qllBLDa740mE+6E+dGu87IyCCGIwCT8w47jnZFCSMqusgUkB1zhvcZAP5iljnliSRYpXRZV2SBWIDrkHB9RkA49QKZWguh0WpR6UdB0n7PZTRTzxuBKbhMZEhBL/uxu/MYGOtXZPDWhjWI9MXUJTcrOYpUUsWYAHLYaJQvIHG58568ZPMJqF7HZPZx3c6WrnLwLKwRj6lc4PQVK2s6o8cUb6ldskOPKUzsRHxj5Rnjjjiun2sHq12MeSXR9zo5PDWj/ALiRWvkiaIyygyIzAfZzMAPlHTGOevtTtBtodP8AEmmX2mNcW/2ixuZkWSQGSJljlAIYBf7uQcCuf0/XLywuhP588hSJ0jHnEbCYyisD2KgjH0xxUml69Ja6+mp6l5+oHY8cgech3Voyn3yGxgN6HpSqzpyT5Fb9BxjJPUteHruS816eW8uLuS8nhmP2nzQWz5bFt29W3ZAx1B96f4OvruG41G0iupo7afTroywrIQkhED4LL0OPespNUnsLqZtDubywhkPCLcndgdAzKFDfkKt6XrcNlJfXV9Bc3t9cwSwpMboKq+YjIzMChLn5s/eHSspSTp8vky0mp39DGrprvQNNh8F2uoR6xYPdNczKdq3GZAEiIjAMYUMCxyTgfMOTjjmaeZ5Wt1gMrmFGLrGWO1WIAJA6ZIA59hUdClvcSKRopkkT7yMGH1FamueI73xA0ZvliXy5JpFESkcyPvbqTxk8Vk0VnKlCU1NrVbDUmk0upb0q/k0zVILuJVk2Nho2GVkU8MhHcEEg/WpvEFhHpXiPULGBi0VvcOiEnnaDwD71Dpl5Hp+pRXctstz5J3pG5wpcfdLeoBwSOM4xmq880lzcSTzuZJZWLu7dWYnJNRyS9tz9Lffr+mv3lXXJbz/r+vI1dF8T32hQNFZLCVaYTfvFJwwR07EcYkP5Cobezt5PDt5dtbag9xDNGqTRRg2yKc5EjdQx4x+NZtaUWuXEHh6fR7eOKKC5kWS4kXcXm2nKg5JUAE9gD6k1caUIylOK1dr/ACJ5m0k9kZtFFFaCCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA6DwNbzXPjCwSDT5L798m8RmUNCu4AyBomVlK565wO9a2keHHbxHq1nqPh++ublW/cCa0uJI4tzHDS+WyyAEDhhu78GuS07T7rVtTttP0+Lzrq6kWKGPcF3MxwBkkAc+tT2Oh6hqOrvplpCrXUe/eryoioEBLlnYhVAAPJOK0UkuW62v8Ap+RDT117f18z0bwol7p2mxW0MF7JDHrVzFcyafcH7HEoSIbpgVIkiAycMy8A881iWnh2wfSreQaYLqwmtJZbnWvMdRbSjfhBhvLXlU+VgS2/g8iuZt/DGtX1/cWel6bPqc1tjzf7NX7Wq56HdFuUj3BrLZWRirqVZTggjBBoc01by/S39fmNRs/673O41Hw9Y2+i3TrpWyyjso5rXWjK/wDpMx25TlvLPJcbVUMNvJ4NPuPDd0dO8Hw65Z3djYlmiup5YWjEQediAWYYUkHIz9elcHVpNNu5NKm1JIs2kEyQSSbh8ruGKjGc8hG5x2p86ve39X/4Nhcrta/9WO5u/DWny+ItMsoNBvLCV2mMkd5ZTRR3CIm7CKbhnkfg/ddQcr05NGr6DoulXE902jsVXRhdiynMkGyb7SIvmXzXZeOqlyev3T04y90LU9PvrayurRxc3UUUsESESNIsgBTAUnkgjjr7VFY6Xe6lq8Gl2cDPezzCCOFiEJcnAU7sAc+tLmWyWv8ASHbq3p/TL3iuytbHXjHYQfZ4JLeCcRBiwQvEjkAsScZY4ySas6DZ+GrjT2fXLzybjzCAv2uSL5cDBwtrKPX+L8PXAnhktriSCZdskTlHXOcEHBFMqLp6oqzWjHzBBM4iOUDHac5yM8c4H8h9K7PWCbz4eaNPa6HC0MYnWWeHzmFqfMHfeQC3X5s9eMVyFvY3F1BcTQR7orZPMmckAICQBye5JwB1NRvDLHHHJJG6pICUYqQGAODg9+acXZWIlHmafY7e9sPDtv45i0D+yQkX22AG5N04OxgCyEEkY+YYIIIx15xV+18FaWkthHqtpJbPNf3SeWzsGlRFzFHgsMZPToSCOeQa82oqudW2/rT/AC/Ez9lLpL+tf8zsL3S7EeLdHtbLw7fBpyqy6feBrMXJ3YAQs7soPTJY8iuWvoWt9RuYHh+ztHKyGEtu8sgkbc98dM1c8Pf2kdbhXRBCb0hjGZhFhMAsWzJ8qkAE7uCMcGov7NvrvVZ7ZdtzdLvkkZJ0kDYBZm3gkNxk5BOah3b08zWPux1KNFXrDRrzU7e4lshC4tkaSRGuY0faAWJVGYM2ACflBqFrC5XTU1AxH7K0phEoIIDgA7T6HByM9ecdDSKK9FFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHR+AhnxlYmT+zPswlT7V/aht/K8neu//X/LnHp83XFb+hal/wAIv4i8SWxl0UQy2F28DbbS6RmKny0V8MOf+eYOD0Irz2ih6r5NfeC0f3fgdvk+J/AVrZ2F5p1re2+pT3F7az3UFikvmKuyRA5RCFCsu1fu5HGDWhpi6PFoNkG/sE6V9gmGqfaDA179q+cLsz++xnytvl/J1z/FXnFFD1TX9bW/r5AtP687not1qGhXGk3+nyQaPFBBo1hJDLBBEs73OYPNIkA3M+GkBXOOCSM5NX/FNxbJ4cv7HTbrw4IX1u2fS7eza2ybdUlCvMR16rnzSSDncADz5XRTev8AXmn+mgLRf12t/wAH1PStRuYfD/j7w5raPoPkeXaLe/YTZzokg2+c3lR5CHrhgo5+6aZG13L8VLaTUJPC0loZ90j5037O1sZfmLY+Qvj1/eY6V5xRQtGn2v8Aj/X3CezXp+B6HZWMFhJrMWnP4cfWPtqNCb65s5rf7IdxPlmRjDuzsyPvgdMc1o2epeFrXW7K3srfQn0+88QzJcyXNvG5S02wjAMgzHHkyENwRjgjnPldFSlZW/rp/l+LG3f+vX/PT0R0Uwx8PgLXb5Y1Z/tO3r/q18nPt/rcfjUt5fvfeF9PAbT/AC4UaO5QR26TL+8yNowH5BHK9ec965+3vri1guIYJNsVynlzIQCHAII4PcEZB6ioK1hNwv52/AU0pWfY7yaXRf7UtUFjp/2H7RmOc3du37va2AyKqvzx/rCSCOuTysb6bezWogttKkmWEuUEcSKzfZCx34wAA/rgAjtXBVLb3MtpIZLd9jFGjJwD8rKVI59ia3WI0aa3+8x9l2Z2GnmE+JrAD7J9sGn3P2o2YTy93lS7fufLnbjO3j8c1j+FUWS/lWc2At2icSfbGhHOxtu0ycg7scr+NZenajc6VfJeWLqk0YYKXjVxggqQVYEEEEjkVHc3D3VzJPKI1eQ5IiiWNR9FUAD6AVjz/vOexpy+7ym34ZhaDWr6JyhZNOvASjh1/wBQ/RlJB/Cl0L/kVvEf2j/j1+zw7c/89/NXZj32+b+G6syw1m80y3uIrIwoLlGjkdraN32kFSFdlLLkEj5SKha/uW01LAykWqSGURAAAuRjccdTgYGenOOprJ6v5fqy1p95qz2k58A2t55WnC3F/JF5qKftRfYDhz0KY6e5NYVTz313dQwQ3NzNNFbrshSSQssS+ig9B9Kgo63DoFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAH/2Q==)**If the input line contains (&&), we break the statement to small if condition statements.   
   Ex: if( x>0 && x<6 ) 🡪   
   if(x>0) , if(x<6)  
   then we pass it to the ifCondition method.

**Figure 11 and**

1. If the input line contains (or) we do the exact same steps done above but with a small adjustment, before sending the if statement we reverse the relop epression. Ex: if(x>0) 🡪 if(x<0)  
   If we have multiple statements, we reverse all of them except for the last one.

**Figure 12 or**

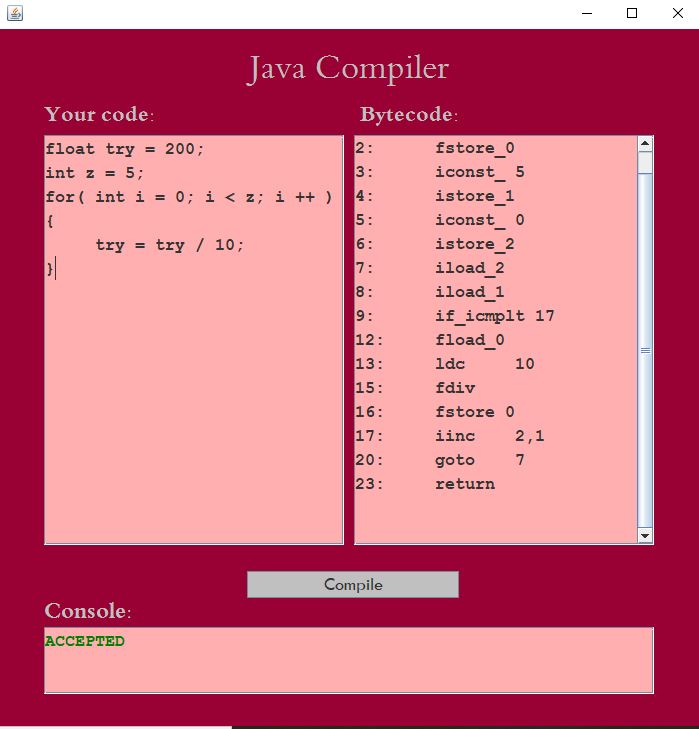
1. Not is also the same.

**Our compiler supports limited Boolean expressions Ex:**

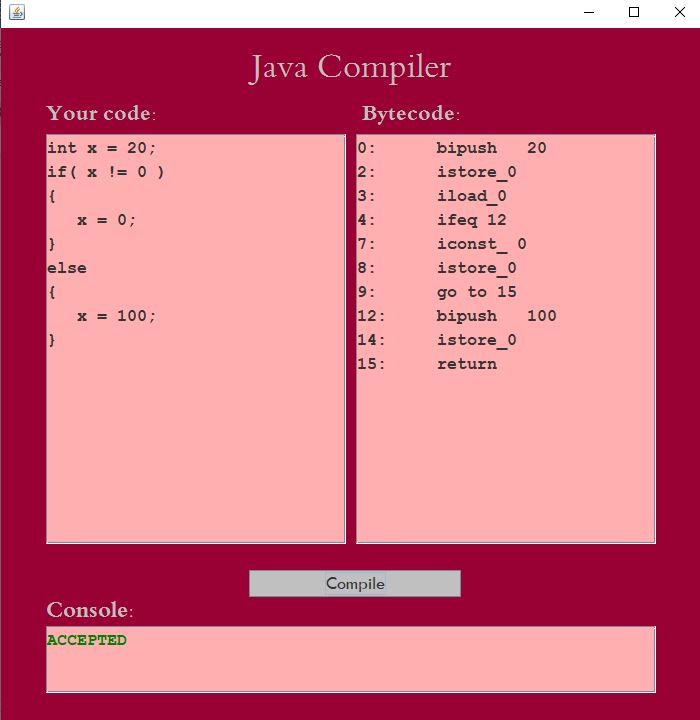
* **It doesn’t support mixed Boolean expressions yet. Ex: if( x<0 && x==4 or x>9 …. ).**

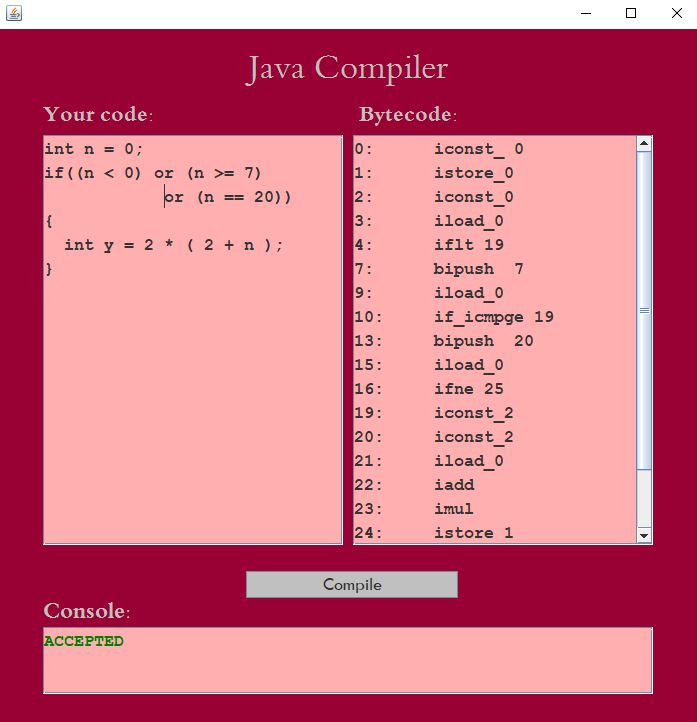
**Sample Runs:**

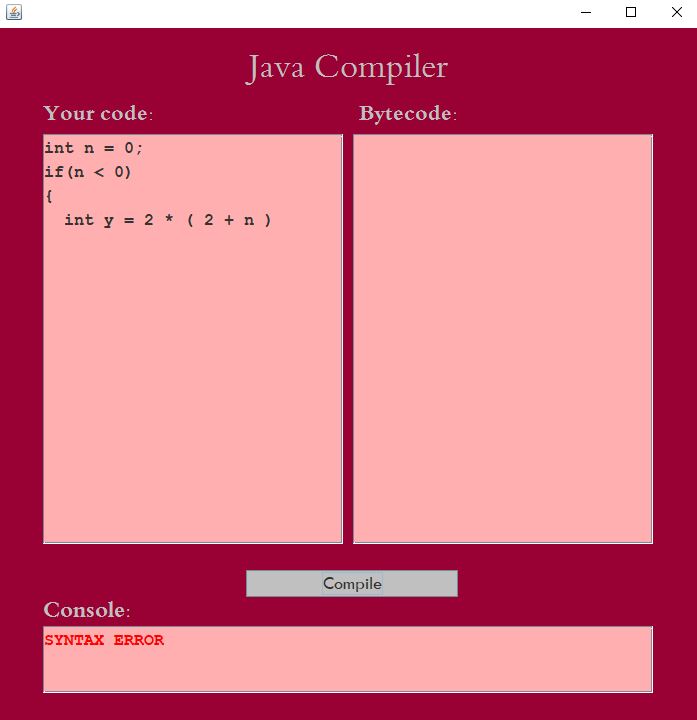
**We added a simple GUI to make it user friendly.**

****









* Missing semi-column
* Missing bracket - } -