**CPT-287 Team Project 1A**

**Movie Management System**

**-Team Members-**

Tu Nguyen

Kyle Molitor

Joel Estes

Josh Vander Veld

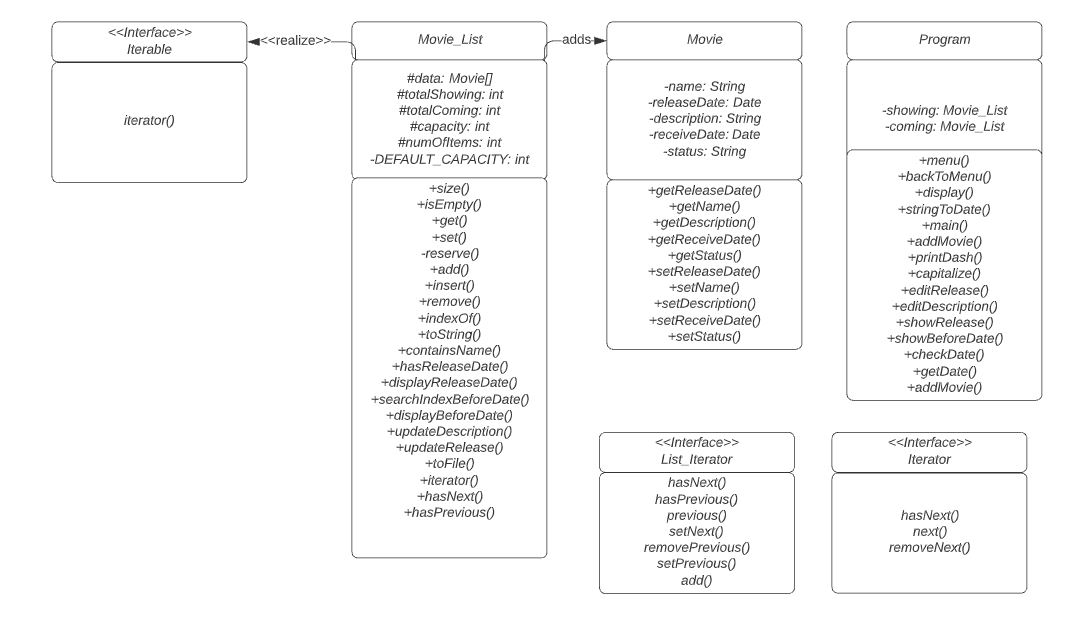
**-System Design-**

*Data Structures*

This system implements the Array List and Ordered Array List data structures in the custom class Movie\_List which contains functions for checking and modifying the list of movies read in form an input file. The Movie\_List class contains all information about the array. The Movie class contains all information about a movie, name, release date, description, receive date, and status.

Initially the movie list is populated by an input file. The user can then edit and add movies to this list using the menu, which implements the functions defined in the Movie\_List and Movie class. The Program class is used to create the menu using a switch statement, and driver code for reading and parsing the input file.

*UML Class Diagram*

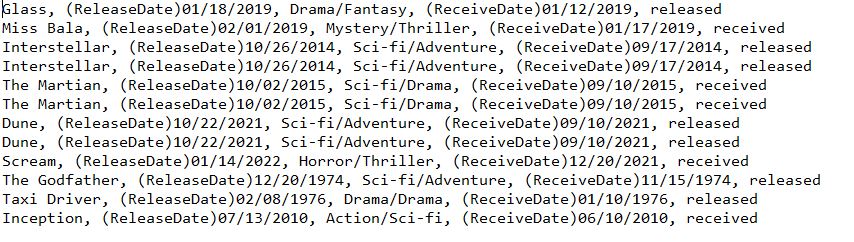
**

**-Test Cases-**

***Test Case 1:***

*Input File*

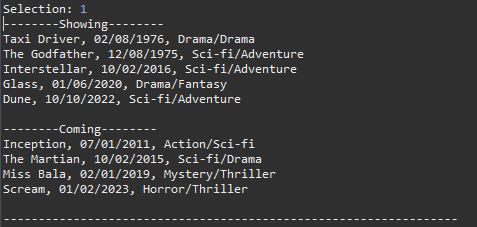
Input file is read into program and populates movie list.



*Output Console*

User selects show movies option to display showing and coming movies.

Expected output:

**

Actual output:

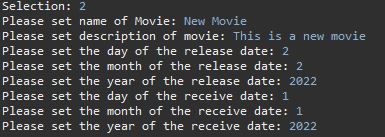
![Text

Description automatically generated](data:image/jpeg;base64,/9j/4AAQSkZJRgABAQEAYABgAAD/4RDaRXhpZgAATU0AKgAAAAgABAE7AAIAAAAFAAAISodpAAQAAAABAAAIUJydAAEAAAAKAAAQyOocAAcAAAgMAAAAPgAAAAAc6gAAAAgAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAEt5bGUAAAAFkAMAAgAAABQAABCekAQAAgAAABQAABCykpEAAgAAAAM1OAAAkpIAAgAAAAM1OAAA6hwABwAACAwAAAiSAAAAABzqAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAMjAyMjowMjoxNSAxNTo0ODozOAAyMDIyOjAyOjE1IDE1OjQ4OjM4AAAASwB5AGwAZQAAAP/hCxdodHRwOi8vbnMuYWRvYmUuY29tL3hhcC8xLjAvADw/eHBhY2tldCBiZWdpbj0n77u/JyBpZD0nVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkJz8+DQo8eDp4bXBtZXRhIHhtbG5zOng9ImFkb2JlOm5zOm1ldGEvIj48cmRmOlJERiB4bWxuczpyZGY9Imh0dHA6Ly93d3cudzMub3JnLzE5OTkvMDIvMjItcmRmLXN5bnRheC1ucyMiPjxyZGY6RGVzY3JpcHRpb24gcmRmOmFib3V0PSJ1dWlkOmZhZjViZGQ1LWJhM2QtMTFkYS1hZDMxLWQzM2Q3NTE4MmYxYiIgeG1sbnM6ZGM9Imh0dHA6Ly9wdXJsLm9yZy9kYy9lbGVtZW50cy8xLjEvIi8+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczp4bXA9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC8iPjx4bXA6Q3JlYXRlRGF0ZT4yMDIyLTAyLTE1VDE1OjQ4OjM4LjU4MDwveG1wOkNyZWF0ZURhdGU+PC9yZGY6RGVzY3JpcHRpb24+PHJkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9InV1aWQ6ZmFmNWJkZDUtYmEzZC0xMWRhLWFkMzEtZDMzZDc1MTgyZjFiIiB4bWxuczpkYz0iaHR0cDovL3B1cmwub3JnL2RjL2VsZW1lbnRzLzEuMS8iPjxkYzpjcmVhdG9yPjxyZGY6U2VxIHhtbG5zOnJkZj0iaHR0cDovL3d3dy53My5vcmcvMTk5OS8wMi8yMi1yZGYtc3ludGF4LW5zIyI+PHJkZjpsaT5LeWxlPC9yZGY6bGk+PC9yZGY6U2VxPg0KCQkJPC9kYzpjcmVhdG9yPjwvcmRmOkRlc2NyaXB0aW9uPjwvcmRmOlJERj48L3g6eG1wbWV0YT4NCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgCiAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAKICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgICAgIAogICAgICAgICAgICAgICAgICAgICAgICAgICAgPD94cGFja2V0IGVuZD0ndyc/Pv/bAEMABwUFBgUEBwYFBggHBwgKEQsKCQkKFQ8QDBEYFRoZGBUYFxseJyEbHSUdFxgiLiIlKCkrLCsaIC8zLyoyJyorKv/bAEMBBwgICgkKFAsLFCocGBwqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKioqKv/AABEIAOMB3QMBIgACEQEDEQH/xAAfAAABBQEBAQEBAQAAAAAAAAAAAQIDBAUGBwgJCgv/xAC1EAACAQMDAgQDBQUEBAAAAX0BAgMABBEFEiExQQYTUWEHInEUMoGRoQgjQrHBFVLR8CQzYnKCCQoWFxgZGiUmJygpKjQ1Njc4OTpDREVGR0hJSlNUVVZXWFlaY2RlZmdoaWpzdHV2d3h5eoOEhYaHiImKkpOUlZaXmJmaoqOkpaanqKmqsrO0tba3uLm6wsPExcbHyMnK0tPU1dbX2Nna4eLj5OXm5+jp6vHy8/T19vf4+fr/xAAfAQADAQEBAQEBAQEBAAAAAAAAAQIDBAUGBwgJCgv/xAC1EQACAQIEBAMEBwUEBAABAncAAQIDEQQFITEGEkFRB2FxEyIygQgUQpGhscEJIzNS8BVictEKFiQ04SXxFxgZGiYnKCkqNTY3ODk6Q0RFRkdISUpTVFVWV1hZWmNkZWZnaGlqc3R1dnd4eXqCg4SFhoeIiYqSk5SVlpeYmZqio6Slpqeoqaqys7S1tre4ubrCw8TFxsfIycrS09TV1tfY2dri4+Tl5ufo6ery8/T19vf4+fr/2gAMAwEAAhEDEQA/APOrPQ31JL29lvLaxs7aUJJcXO8rvYnaoEas2SFJzjHHXpVa30XUb77S2l2dxqENsT5k1rA7oo5+Y8ZAIBPIFaWhanb6XfXUs2rahYF2KNFa2aXEc6ZOVkV5FUj2IYVt2/jXTUSZbSE6N5eoSXloYdLt7zYHC4AEpXyypQYKHv04FN/1+Akc1BpFtceFrvVI7yX7RaSxpLbtbgIQ5bBD78n7vIKj61UfSNSj0xNSk0+6Wxc4W6aBhExzjAfGDyD3rZsNR0ZfC+p2d/d6gL2/kjlPlWSNGpQsQNxlBOd3PHHvVzVPF1ve6H5VrM9rO9nDazWy6XblXVAo/wCPnPm4OwNgg4PGcc0v+APqYCeHdakgtp00e/aG6YLbyC1crMSMgKcfMSAenpVzU/Buu6TrKabd6bdGSSTy4nit5GWYgZPl/KC2B6UvifUdL1rUJtWs5r1bu5dWktZoF8uL5cELIHywBAAGwcfTl+u32ia1r/8AaX2q/hF02+6T7GjeSdo4Q+aN4z67eKa3QdCnfaDcR+JLjR9KiutQlikKoq2jpK4AyT5RG5foaih8P6zc3ctrb6RfS3ELbJYY7Z2eNsE4ZQMg4B4Poa6TUPEehXesa08c2pLaazEFkl+yoJYGV1YAL5uHU7cH5l/TmtqHiu2nsLiztPtgRmskSSQgNLHAjglwDwSWUheQMdeAaUdlcH1ObSwvJPtGy0nb7KC1xiMnyQDglv7vPHNV66O+1yxvtZ8R3vnalAupNI9vHA6qHLSbgswzyuOwzziucpK9lcbLs+mSW+mQ3rTQukrlNkb7mQ4B54x0I78dDg1SrXkudNPhxLNJ7o3CymbBt1CElQCud+ccdcfhWRVyspaExu1qFFFFSMKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDc1H/kVLL/sJ3n/oFvWHXSf23eaVoFsNI1Oeyuft935gtbgxvsKwYztIOCVOP90+lZVrrur2InFlqt7bC5OZ/JuHTzTzy2D83U9fWgChRV2HWdUt9Nk0+31K7ispc+ZbJOyxvnrlQcHpQ+s6pJpa6bJqV29gn3bVp2MS854TOOvPSgClRV661vVb63ggvdTvLiG3wYY5bh3WLAwNoJwOPSn3HiDWby8gu7vVr6e5tzmGaW5dniP+yxOR+FAGdW5oXh6PVdPv764uLhILEKZEs7X7RLg5+coWUBBtOWzxkcc1UPiDWTqY1E6tfG+Vdgujcv5oX035zj8as6drcMWpNqWr/wBq3d/vDpdW+pCGQH1LNG7E++RTXmJlu08Iz6vocN3oga4lkvZrcCaWOHeFWNkCqzcudzfKCx446E1Qt/DGrXOn/bYbZTEUaRUaZFkkRfvMsZbeyjByQCOD6GtQ+N3k1q01GXT499vqsmpGOOTarF/L+Tocf6vrznPSmQ+LLdIbaaXTGk1Kztntre4FziII27BaPblmAdsEMB0yDg5npf8Arb/Mr+vxf6GZJ4b1eK6ngksnV7dZHkJYbQEUO2GztOFYHAPceoq5f+G5IV0S3s4ZJLzUkx/x8wyRSuZCqiNkY4HQHcQQc1oXfj57rSrmy/s8L51pHAH87O2QALJJ93+NRjHbA5OKi/4SrS4f7Daz0i8STRphJGZb9XEg8zzGBAhGCTwDnj0NPr/XmTrbzM+bwjrUF1bW72qGS6Z1j2XETqCgy4ZgxCFRywYjHfFVdV0O+0U2/wBvWAC5j8yJobmKYOucZzGxGMgj8DXR+D9dgN5YWVz5Vutq17OsssyKsrSwhRHlxsXJTGXyvzcg94/FWpPZarp97pGpS2t6tsUeKzvIXFqNzAKkluqIAQclVHGTk5ND0sVprb+tf8jj6K0YfEGs21/NfW+rX0V3OMS3Edy6ySD/AGmByeg602113V7ETiy1W9thcnM/k3Dp5p55bB+bqevrQIoUVdh1nVLfTZNPt9Su4rKXPmWyTssb565UHB6UPrOqSaWumyaldvYJ921adjEvOeEzjrz0oApUVeutb1W+t4IL3U7y4ht8GGOW4d1iwMDaCcDj0p9x4g1m8vILu71a+nubc5hmluXZ4j/ssTkfhQBnUVZvtRvdUuftGp3lxeT4C+bcStI2B0GSSarUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHRaBZ6RqGqXVtqtteyOI550e2ukiAEcbvtIaNs524zkYz0NP0XwhP4rluH0ANFGkgVIJ0mmYZHG6WOHYM88ttH4c1k22oS6Zqk9xbqjOyTQkOCRiRGQ9D1wxx71o6H4vudCtreKKwsbo2t0bq3kuUctFIQoJG1gDwo+8Djtim/0/X/ACF6Edv4Vu7nS11FLq0Fkqv9onZm22rL0ST5c7myNoAOc8dDhbzTbaHwVZX0ItpZpbt0knjll3r8iny2RkCjGc7lJznHaktvFV1a6f8AYEtLNrN0dZ4GRitwzHO9/mzuXC7SCMY4HJy1/ESv4bXRv7HsFjVzIJw0/meYQFL/AOs25IA4249qT2dvL8/6/q5Wl/v/AOAQ+GtNg1jxPp+nXbSLDczrG5iIDAE9iQRn8K1l8MWet2tnceHWltfOuZLWSHUJ1cIyp5gYSKijaVBGCvBHUg8YWkanNo2sWuo2yRvLayCRFlBKkjscEHH41pHxddJLa/YrGysre1MjJbQK5RnkUqzsWYuxwcDLYGBgdcj2Et/68/8AgEulaBZnxNpltLqel6hb3LqcLLOiSHft8piI96E+u3GDnNUZdDnmi1C5tVjK2l2tu9ujMzrvLBSOOVyuM9ckcc1Bo2qf2NqkV+tnb3ckLB40uC+1WBBDfIykkY7nHtV+28WXFjrs+p2NhZW7Trh4AJGj3bgwfDOTkMoYc4yOmOKO3z/T+v6YdzQsfhvrWoy3KWzQv9nuWtd6RzSK8q43LuSMhQCQNz7V9DgEjOj8LyHTYru61TTrMziXyYLiRw8hjJDDIUqDkYBYgHPXriK08QtDppsb7T7PU4BK00YujKGidgAxUxup5wMg5HH1qlc6jLdWFnaSKgjsw4jKg5O5txzz6mlqBUrQ0HSzrWvWeneZ5QuJQjSYzsXucd8DPFWLvUNNPhWz061td16k7zz3bwqjAFQBECCS6jBOTjrwO5oWF9caZqNvfWUnlXFvIskbgZwwORVLcT2On1rw1pemWNjqbR31vbSTNFPZSXEclwvy74ySEUIWH8JBKjB5yBVHV/D0S61pdloyXAl1GCKQWtw4eSB3JAVmCqDkYbOBwwp3/CaTjULS4TSdNEVrO9yLVlleKSZusj7pCzHgY+bAx065ibxOjajdagulwQXk8EkayxTzNh34aU+Y7kttLAcjk57Uv6/D9WP+vx/Rf132LPw1pGp3OoXdtBcy6fb3CWkKwXCw5AQl7iSSQOEXCFsY6uAMYxVqz8BaeuoXdtdteXaw3xtxLbyiHbFsDh1Vo2MzlST5aEMMdMHI5TSPEE2k2lzZta299Z3LI8ltcmTYXQna3yMp4yeM4OeRwMaEHjnUEm8+6tLK9uEvGvYJp0cNBM2MsoRlBHyrwwI+UcUf1+X/AAf62P6/P/gf1vS0uxtv7P1PUb6My29tH5MAOV3zvkJ0PYBn/wCAgHrU0+kaafCtjqFnLcieW8NtO05URg7FYlVHIALYyWOcZwM4FK+1drzS7WzWLyxE8k0zl8meVzy54GMKFAHPc96syeI1k8Nro39jaesSP5gnVp/M8wqFL8ybckAcYx6AUdPu/wCD+v4B1+//AIBt674Ps9HsZr57LU4reyvEt3M86D7fGwbEsJ8v5B8n+2PmHJxy2HwvpWqvpEWnx39jPfJNcSRTXCXBFvGpIYYjjwzFXAB44Bzg1gXuuNc2C2NtY2thaCQSyQ23mESuAQGZndm4BIwCAMnjmpH8T3sniM6w8cBkK+V9n2HyfK2bPK25zt28dc++eaP6/D/P8AG+ItNj028hFvZy20EsW+MvfRXYk5IJWSJQpGRjHOCDWRXR2niGzm17TbjVbGGHTdO5jsbW381HG7cVIkck7iTliWx6HGKwrqZLi8mmihWBJJGdYk6ICchR7DpSGdLpOh6JPpGkvqQvxcapeS2qzQTIEg27ArGMoS/L8jcvAqrJ4Qkgt/Mu9W022ZmmWGOaRw0piYqwGEKrkjjcQDke+G6b4sn0zTra2j06wnks5ZJrW5nR2eB3AywG8IcbQRuU4IrNvNUuL6ztbe42kW2/a/O5t7FiWOeeTTfkJba/1v8A8A2YPAup3OgR6vbyRvbvszuhnTbucIPnaMI2GIBCsx+uDT9T8BX2l2ZuJ9R0+RVcIywvIzL+8MRONnIDqRxnPbNMHji8W08pdP09ZWggt5LkI/mOkLKUB+faPuAHaBnv2px8far5ySrDaK8colU+Wx+YTtP3b+8xH0x35p6X+f4C15fMreIfB+peHFtHu8SJdsyxFYZoiWXGRtlRG/iHOMH161ptoei276ml5b3Mh0Wyi+0LbXAjaa4aRVfLMrgBS+3gDOzPeqf/AAmRa4sWfSLKKGwmluYYLcuAZnA+Zi7MWAZVOM9sZA6Z2la9Jpv25ZbO21CO/QJPHdGTDYcPnKOpzkDvSV/6/r+tBu39ev8AX4mreeD4vOlubTU4LbTBbwXSy3xbeiy52qRGrFmBBGQOeuAM4ZpPgS/1y6u7fTLu2uHtpfK3QxzyxyE9CJEjKKD6uV98VQv/ABNe6il6k6QKl2Il2Rx7VhSLOxEAPAAOOcn3zk1Y0Pxfc6FbW8UVhY3Rtbo3VvJco5aKQhQSNrAHhR94HHbFHf8Ar+tAd/69P8y5afD3UbvT4rsX+nx+bGkiwvI+/D79o4QjJMbjr2ycDmqjeDdQHhU6/G6SWioruPInTaCwXh3jEbYJAwrH9DUkHjnUreGGNILQrEsSrlG5Efmbc/N/01bP0H4x3HjG6uNJmsmsLFHntYrSW6VH8144ypQcvtGNg6KM96H1sPS67HPUUUUCCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDpfDX2CbWLu11DSbW+HlXM6vNJMrKY4ncAbJFGCVGcgn3FaOm6NpniPR9OR2i0m4vdUmt4FtrZpQSUh2qWZ9wQEnksxBbgHnHKpez2GoTTWknlyESRk7QfldSrDn1ViKfZ61f2H2T7JP5f2K4NzB8inZIdoLcjn7i8Hjim9/wCu4ten9aG5b+Com8Ppf3usW1pPNDJPDDLJCqsqlgAd0okyxQgbY2HI5645q1g+03kMG4J5sipuPRcnGavJ4h1BdL/s9mt5rcBggntIpWjDckI7KWTnn5SOTnrWZQviu9hvbQ7268LW2p3F1p2g2um2/wBjv1snlmluTddWXzH/AOWWG2McKMjpj1yrfwlZaisNzperSSWG6YXMs9p5bxCKPzGIQOwbK9PmBzwcdapzeMtdniVXvVVxJHKZo7eNJneP7jPKqh3I9WJpr+Ltaa8guVuYomgLlEhtYo48uMOTGqhGLDg5ByODU9A6nV6fo/h2bxF4ThZpntprTzBusEBuXE0v+tXzOBhQM5bIAFY1rpVr4r1e7mN48FpCsarcJp9paLlugZPORAeDjDMSAeOKyZvFOsT6naX8l0v2iyTy7ZlhRViXJO0KF24G44GOOnYVFpev6jo0c0enzRqkzK7rJBHKNy52sA6nawycMMEVStfXzB+R0MfhrRLHSvEEes3l0LzTLxLcy21qJFX5nGVBlXdu285AxjjOaT/hHtO1LQtL8q8+z3p0y5uVjW1BEwilmYmR9wwSq4GA33cHAxnDi8TapDfXt350Ust+2+5E9tFKkrbt2SjqVznnOOKij13UYmiMdwF8m3kto8Rr8scm7evTv5je4zx0FTry26/8D/MelzZ1DwZFp2gm8uNXt1vVt47g2jSQjIcKQqgSmQthgcGMDg89CamvaHpejNPbRavLcX9u6q8LWexGBGTtfeckcZBA68E4qnca/qF3pqWN01vNFGixo72kRmVV6KJdu/A6Y3dOOnFVbq9l1DUGu9QYzSSMDIVwhb6YGBx7U+ouhWrY8Kx2Nx4msbbU7M3kNxOkPl+aUXLOBk7eTwTwCOcc4GCniPXW8QalFceT5EcFvHbRIWDtsRcAswA3N6nA+lVdK1a60a+W7sPJE6/daa3jm2nIIIDqQDkdRzTi0nqKSbWhr6PaW7eKLmxGjRaivnlQJ55EjgiVjvdirKRgY+YtgAHIPZdPtdNh17VdRgUXOkaYZJIFnUHziWKwqQRzkkEjHRWqvF4x1iCa8kjaxH24KLlDptuUkCnIypj29eenJ5NU7rWri605rN4reNJLg3MhhhEe9tu0DC4UADOAAPvGoSaSXkU7Ns7PSvCelT6NYR3sUCSajZSTx3jSv5xm+chY0VtgRQgLMynqQDnAFW80PTIvCczRafCb2LT4Llgsr/aoi7LmSQbzH5ZBOAq7wGTcB9481b+JNUtdLOnwXCrBsaMEwoZERvvIshXeqnJyAQDk+pp03ijVrjTvsM1xG0JjWFiII1kkjXG1GkCh2UYHBbHA9BVPW9v63Eul/wCtv+CT3MVrpnh/ToLu3Es97J9smKlVkWAfKiBiDtLfO3QjBQ4NatxpmijxVYq1tb2ltcaYlytvLcOsTztEWVGkZsqpbAJ3D6jrXN32r3F/rLalKkKy7lZYxEGjQKAFUK2QVAAGDngc5q1eeKtTv7i2muxYSPajbF/xLbcAKBgKQI8MAOgOQO1G/wB/6W/y+4Da1PS7bTtS0n7LomnX0+q2w/0GO5mlhjk81kHlukoJztHVmGScHpiysXhNta1S1W30qGSNoILUXcl4bd3GRMwMbFgC2MbjjFcsPEWqDVl1JbrbdpGY43WNQIlKldqLjagAJxtAx2xUel6xd6PK0tiLbzCQQ01pFMVI6FS6nafcYoXmD8hmq2c2n6xd2d1AlvNBMyPEjEqhB6AkkkehyfrVOtvTvEklhY6wrRyXF5q0Rhlnml3LtLBmJUrkvkcNu4yeDWJSV1oN2OsvdOsLnw0JvDlnZXSwQI95M00ovIGyoYmMuEKbmwCitgYyQazta0bTtFuzYTajcy38EojukS0Xyo+Pm2OZMuQeOVUHnn1hk8R6jJpr2Km1hgkRUk+z2UMLyKMEBnRAzDIB5JyRk0XniTUtQWL7a1tO8TKwmksoTK5UYG+TZucY7MSD3zT6i6F/xRYIdcsILE2oSeyt2ibyUtFIZBgvlyoY/wATFsE1Y8JaHZDxxZWOvSo43q6R2piu4pTydrssmAOOevoRWNq/iDUNcWEaibZvJULGYbOGEhQMBcooJAHQHgVVsL+50y+ivLGTyriE7kfaDg9Oh4o6382HSx1GjPYax4vmxLDJm1kFuJdFhjjciJid0UcgVCMHDDcc4JrJ8NwQrPc6pexJNa6bEZTHIAVkkPyxoQeCCxBI/uq1VdH12+0Gd5tNNukrjaXltYpiBgg43qcZBIOMZ70XWtXF1pzWbxW8aSXBuZDDCI97bdoGFwoAGcAAfeNHoG+50el+EJbzwTNfPpNzLPcRTXNveoj+XEsRX5Tj5RuAl68/KuOtOt/D+m6doespe3DT6iunQTun2RSlsJJYjlJC+S+1gDhQOSM+vMpruox39neLcAT2UaxW7eWpCKucDbjB6nOQc5Oc1Zm8WazcaW+ny3am3kiWGQCCMNIikFQzhdzbdoxk8DgcGh+X9f1oC6X/AK2/4JonwPMdRktEvUJe/is7OQphbneN3mdflUIVY9fvAVNJ4JsRqNrBD4ggaKVJ2lb9zI8IijMm4rDNINpxgfMDkHj1wJde1SdbBZLx/wDiXY+ylQFMRGMHI5JG1Rk5OAB0AqW48S6lcXQuWNrFMEkQvb2UMJYSKVfdsQbsgnk5IzxijpoC8zoNI8LaGfEGnx3l9dXVjf2Mt1B/ogRyVEgIcCX5cGMkYJzwDjNYLaPaTWN1e6dezywQXMEC+fbCNm8xXJOA7AY2epzntUEWu6jBcWE8Vztk09PLtjsU7F3M2CMYYZZuuc5x0qxb+K9WtLmee1e1hacoXWOxgCBk+6yps2qwycMADyeael/67/5aB0NKfwnpunS3v9r61NBFbak+nh4bLzSxXneRvGB6jJPTGeyweC4G0FL+51q2t5JoZJ7eOR4lV0UsBndKsmWKHG2NhyOeuMG+1m/1JZhe3Hmie5a6k+RRulYYLcD9OlSx6/qEekjTS1vLbKGVBPaRStGG6hHZSyc8/KRyc9anW39dv8x6X/r+tjMooopiCiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDp/ClyYtfvIWt7OeN7a6kIubSKfDRwyMpG9TjDAHjrjnNWtA0XSNajsJtW+1i71bU5LRfsZihii+WM79uw9DJ90YGO4xzgW2tappF1c/wBk6leWPmv+8+zTtHvwTjO0jOMn86kiPiC7gk1SA6lNFazGeS8TzGWGVsZcuPuscLznPApve4v6/A2DHoUfw8jll0y6kuxfyQmdLpFO7y1IJ/dE7P8AYz1z83PC6v4d0DStDUS6ow1ZrSG5SMM7CUuFbaF8kKAAx+bzW+705wOctNX1LT4Z4rDULq2juBiZIZ2QSjnhgDz1PX1px1vVTpY0w6neGwHS0Nw3ldc/czjrz060nrf5fkVpf7/zNjXNO8OadqUmmRHUop4Z41e5lkSSNkIy/wAgUEEZGOTnHQZrRh0fRLTxZoksNpNd6Pd3QijmN/HIs7B16gwqVA3DKOoJB4OOa483ly14LtriY3IYOJi53hh0O7rnjrU1/rGparMkuqajd3skYwj3E7SFR1wCxOKadmmS1dNHS2+i6FqviLViUuNOsdNjeWZJbncWPmhOCkBKKN2fuNjGMjORN4ckttO8dvaeHdUmn064tZfM2u6h/wBw5KNlU3hW6EqM4zgVzL+I9bl1CK+k1nUHvIVKR3DXTmRFPUBs5A5P506LxLrsF5Ndwa1qMdzcY86ZLtw8mOBuYHJx71KVkl5FN3bZqeFLy5XR/EdmtxKLVtMeRoA52Fg8YDFemcd6t6N4RsNQ8Nm4vHlt76SzuLy3AnZt6RBvm8sQkAZUrzKD3x0BxbHxD4l+1NHpusat9ou5dzLb3Um+aQ8ZIByzHgetV117WIrNrNNVvktmLFoBcOEJbO7K5xzk59cmm9fut+f+f9X0S0+/+vyNHU7DQdO023jZNRa/uLGK5WYSx+Urtg7Sm3JGM/NuyMjg4ycOa0ubeGGW4t5Yo51Lwu6FRIucZUnqM8cU2WeWcoZ5Xk2IEXexO1R0Az0A9K0tT1S+1fTbQNaiHT9NTyIlhVzHGzkscsxJ3MQT17cAAUPv/X9bAtrFGyuRaXkc5ghuNhyI51LITjgkZGcHnB4OOQRkV3/9m2C+M/FUqpYW32GMPCJ7ZXhgUugdxFgqxAJAXBGWH1rz+zvbrT7pLqwuZrW4jzslgkKOuRg4I5HBq5J4k1yW+ivZda1B7uFSsVw105kQHqA2cgfSj/ggdRqWmaYnjSO+ig8rT7exi1K6gdBHztBCFV4QyMU+UcDfxwK0PDUVnf2VjqOppbXcur6pLHdo9sk01w5KbY0LA+UuHZmcEEZGMnFcDJq9/LBdxTXUkgvJFluGkO55WXOCzH5j1Jxnrz2FJZ6tqOnQTw6fqF1axXA2zJBMyLKORhgDz1PX1oX9ff8A0vkD1/ry/p/1c6e1FvYaPqhvrSybSAJ7e0ma3Qz3U+fkZJCC4C/KTghQBgjLc5ef7J8HYyBc6y+SOcrbxt/JpB/5D96pweJNctbEWVrrWoQ2gUqLeO6dYwD1G0HGDk1Vu9Qur6aKS5l3NDEkUeAFCIowoAGAP8eeppf8D+v66aDv+v8AX9dTurO1tL240PS/EOn2Nve3V/E8dvbwrC0dsV4SVlAJ3krjeS+MkkbgTB4iNhBo9hqa21jcX0V7LbyGOzWG3lwgOFRAu8RswG5h8xPIK4zy174k1zUrcQajrWoXcIYMI57p3XI6HBOM0kniLWptQivpdYv3vIVKxXDXTmSMHOQrZyByenrVdf68v8hLT+vX/M66XT9Lj8d+JpriGGGHT4TNDElqJERtyLkQ8K2AxO04XOM8Zrndf0m7fxAY7WNrxp7dLpBb2KwHyzGGyYYxhMDrjI75PWqkniTXJb6K9l1rUHu4VKxXDXTmRAeoDZyB9Kl0zxJqGn6pPqMbfaNRuEZBdzu7yIWBUsPmwWIJHzBvzqbaJf1/WwGPXYaV9m1jw6ul6P8AZLXUo4JXuUurGOQ3QUMxaOcqzRsFAG35V4yGya5OeCW2uJILmJ4Zo2KvHIpVlI6gg9DVwa/rA0v+zRq18LHbt+y/aX8rGc42ZxjPtT3QdS/rGm6bo2n2sEkN5Nf3VpFdLceeqQqHG7aI9hLYHGd45zxxzY8SGKXQfDb28lwlu1vKqRXMiSeTiVgcMkakgnJ5BIzjNYw1rVF0s6YupXgsD1tBO3lHnP3M4689OtSXviLW9StBa6jrF/d24IIhnundMjpwTih/qHQuWFhpdp4hsIrm7h1m3lkVWWxeSLaSwA3GWIZHsBz6iujvNZS/+LsCyy6sVt9QMEBe/SQwSedgNGGiKqg4+TaenWuAR2jkV42KOpBVlOCD6irVrq+pWN9Je2WoXVvdSZ3zwzskj5OTlgcnJ5pp2afYTWjXc1tNs4n8WXlzffvLTTpJLq4L8eYFbhDju7FV/wCBVu+GdMOr2tzqWr/2fJJrV09v5l5PFG8YKktJGJCCSJHj+7k/KR3rkbnX9VvYbiO9v57kXJQzPO+932Z2guctgZPGcdPQVUa6uGSFGnkKQZ8pS5xHk5O30554qYqy5X/XcqTu20d54f0O30hcz295LqNxo99O0iyBYbdQkse1l2EscrydygFgMHvjXHhqwj019UjmmFjLaQm23uMm4dtrIx24wpSU9BwB65rHPiHWmgkhbV78xSuzyRm5fa7MCGYjPJIJye+TVRru5ezS0a4la2jcukJc7FY9SF6AnA5p9bv+t/8AP8Ben9bf5fidtfeEfDVvr1po0WqzPff2jFZzxqzlnRm2s4DQosZHBA3SA568ZMen6T4dTUvD99FbX0tpdak9pJBczxncUaPDn93jad/KYPTG7vXMSeIdZmht4ZdXv3itWV7dGuXKwsv3Soz8pHbHSqhurhoUhaeQxRuXRC52qxxlgOxOBz7CnF2d2Jq6t/XX/gHQ3um6Xe3uvNp9rd2g0+BpRHJOsmXE6Ieka4XDnjtjrVu78M6TpDai+ppqEi2VvZv5CSpE5eaMMwLFDtAJOPlJ4x7jBbxLrr36Xr61qLXcaGNLg3bmRVPVQ2cge1VJ9Svroym5vLiYzbfMMkrNv28LnJ5x29KlKySKbu2/66f18zq9O8PeF5tMbU9Q1K4tLG4vJLe2MrsHiVVU5YRwyB2+f7uY8468/LxsgVZGCNvUEgNjGR64q5p+tappKyLpWpXlksuPMFtO0e/HTO0jPU1S69afUXQSiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooA7jwqbpdK1NtChvJtTF7H5y6dJsuza/Nny2AYgb9m4gH+HPFX4vD2pt4h8Yx2VvqepItpLALiRGmkkk3xnazAcvjt146VxdvoeravPctpWl3l8schDm2t3kCZJxnaDis0gg4PBolq36fmrAunr+tz0LQ/CNnceD5LjUtOZpXtLqdLuOGT900YbCPIZggfKfc8onb37jNvdBi/4QOLULbR2tDFFG011fQzxvOzNjML7zE689NqsAON3JrjqKHqC0Ox8WaFFZaHa31po7aZAXWIi8hnhupG2Ek4d2jdOPvJg5IyoBGeb1LSb3SJootRg8l5oUnjG4NujcZVgQSOaqI5jkV1wSpBG5QR+IPBq3d3t9rmpLJcFri5k2xRpHGBwAFVERQAB0AUCjroHTU6T4eqr3GqCCa5h1AWoNs1mha4I3r5ghA53lcjI6Asema6i2XULn4jS/2TYXC+Zp4GqLFGZmjlNu/wAkkgGdxONw43OORkceZR6RqUupnTYtPunvlJBtVgYyggZI2YzwPaopLO5ivjZzW8sdyH8swuhVw2cYIPIND96y/r+tQWl/67f5G5pVrcaBbalql9BLbXVqDaW8csZVlnkBBJB5BVNx9iVrtdC8hPCNgw+0zaO+nzLfImVtYZPnLPMejSk+WEU8j5T6CvOJdP1cR3Vq0NzLBpkjGdYsyRW7E7SSVyoztAz3xUUWk6jNpsmoQ6fdSWUR2yXKQsY0PHBbGB1H50nrH+v66gtH/X9f0zvNYtN/gwrZnU7TS4tOgmSZZgljczfJuQoB88m7cdxYkFcbQBmuevYrqyGj+H9OiMl8rrczRGMMWuJMbEIPB2rtGD3ZqwbezuZ7e4uYEzHaKryvuC7QWCjqeTk9Bz+RqfUdO1iLy73VrO+T7ad8dxcxOPtBPOQzD5s5znnrVdb/ANf1/kLpb+v6/wAz0v7Nqlvr+lWHiI3ralbwXSw6tdwSMGuGTKRxMwzJsI+XHV2+XjBNbULLWdU1/S4tDF/ZawtjIby4uWZ7yOEOdskhALiQj+Ffm2sqjIPPnlzoerWd7DZ3el3sF1PjyYJbd1eTJwNqkZPPHFB0LVhqn9mnS737eRn7L9nfzcYznZjPTnpS7f13/wAx/wBf1/W/3HptpLdTahrdzaWWsWmqi4t2a1ghaG9uoRGVySOUV3AaRuRyOvFcV4i0ptT8Wa/NoNvHJa2Za4mEDqEjUEByvPKhiemePauduLea0uJLe6hkgmjYq8cilWQjsQeQanttUu7SwubO2kWOK6AWYrGu91yDt343BcgEqDg4GRS31H5f1/X9alOvUtfOqCy1P+2vtB0H+ybYWQuifK+0eVHs8nd/FnfnZ23Z4rzqDRtUutPlv7bTbuazhz5lzHAzRpgZOWAwMCqVN7WEt7nZapaaS/ilfD2n6Na2zm7hjju5LmY5zjcJAWwVJb+EKQB1NdDf+FNEtUiu5dFlhK21672s8ctsHaFUZCUM0jgHcf4hkdAOp83utMu7KztLq5i2Q3qGSBtwO9QxUnAORyCOcVWVWdgqAszHAAHU00C0d2eo3vhHSD4iaPTtHVoLdboSWqCe5kmEciKpRBKjM3zdmAABOCRzj32i2OheN727ggKWGlW8N55TjI810UpHgs3Bkbpub5QeTjNc1P4Z1SDWLfSnige+uJPKSCK7ikIfONrbWIQ57NiqeLxHfTQ0g3TAPbq/ytIMqOBwSMkA+5qVfSwd7/1/VjrdH8QyaZ4KmuZbjVVludUcs+nah9lZj5akljsbcOenFW9B8K2N74Ne8vrAyPNZ3VxHexRSERtGG2q8vnBA2V+75ZJU9e44l9Jv0uLyAWskj2O77T5I8xYgpwSWXIxnjOcUyysLnUZmis4/MdInlYbgMIilmPPoATRo02uq/Qeqtfv+p193pujLpV9HDpEaT2WlWd79oM8paSSTyd4I3bQpEh4AyD0PYWtftH1ubw81toFpb2d3DaQrqP8ApHlK2NpiLmQrgEEY+/x1rz2iq/zv+ZPT5W/L/I9I1nwxpVpfaFIuhX4+0XM8U9jDaSJLKsYUgiJpnfncT99cr0x1OfeeHIB4hl0mXTre3ub6x8zT44BPG0UoYlVeOViyuwUqQcjLKVOOTxUUUk8yQwRtJLIwVERcsxPAAA6mr+l6rNoV3LLDawm8UFI5ZlbfbNyCyjIG7n+IHB5GDSW2o/T+tR3iKKyttaltNNjCxWoEDOGLedIow8nJ6FgSAMDGKy6Xr1pKS8wCiiimAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAHX6VAb/wvf2dvfWVrdDVoZlNzeRwbVCyAuNzAnBI+7k+1bytoev8Aie31D7TpS28etPJeSXjxxGaEpFhtr4Z1ZlkOMHBY5xkmvN7j/j6l/wB8/wA6ipve/wDXT/IVtLf11/zO5sb3SRp1nYSw6T5culXj3ErxRmXzg0xiHmH5lbhMAEE5HUYp+sTaMng5Y9N06xnja0h23H261WaKb5d5MWwTk7twwXZcHI4AxwdFJ6/16/5lX1v/AF0NHUNFn07S9Nv5ZYXi1KN5IhG5LKFYqQwI4OR7iotLS6k1CNLC4W3ncMoke5WAAFSGBdiAARkcnnOO9RXd7d38qyX1zNcyKgRXmkLkKOgBPYelQU1oxHps76cPF3iRLq6s549UhBtmg1GELOFdGMTShsRhtvO7BwOOSKp6leQN4gm8QKLZv7HsYIg1qR5TXmzbGqHncExnOTkRdTnNefUVPS39df8AMFv/AF5f5HX+E0ubnSdZSXULWOGa0ljiiutRii3TM0ZJCO4PIX72McYzxW/pOp6Va6Pp10z2bfY9OntLpZrpN0R/eZSKIHc7SF1+cAqAfqR5jRTlr/Xr/mwWn9en+R0GpK2leHbLSR8lxeFb66G7GARiFT6YUlv+2g9K6m1ki8N3GlJeanZX9u2oxX2oXsd/DOyy4IG1FcuQu4lmI5PsAW82op3EejailtdWmmaDaahp2nym9mcXR1COTZCyBXkmmViu6Q5+QEcADHOTUutOOq69baa2q2Wn6ZaWHkLMdTtnaeJGLYJWTZvZzkIWwOOcLurhKKX9fhYf9fjc6vUNOvvFfjea3R7GCZ4N0Q+2JMgjii4BljypbanJ4564rlKnt727tYpo7W5mhjuE2TJHIVEi+jAdR7GoKAOzsY4NU8MwxeIzYxW1nbS/Y7yHUYhcR/eZY2g3FnBc9NqtzndioNXVR4btf7GOjnTzaRG4ybf7X5+f3md/7773935duO2a5Oih6gtDrvE9op0HRrqQ6QZ442S8XT7i1Dk+YdmUiPJ245wcd6z9P1PT7PxFYXGkWj2qLKol/tGSK7XBYcjMShcDvgkdQRWDRTTs7iaurHbxaidU+Kck7nRmtFvHEj3ENrHC8Hm8n5wFdiD97lz2NVbWx/sXWtU1l/s7Q6cxe1NtPHKhmcnyQChK8cvj0TmuSoqUrJLsU3dt9zuPDF9omlaVbPquozrPqN0xuY4IkmzCFaPbITIpTPmOeh6A46Z09NFhpGntDa32iCBdOvYbqZnha4muCsqqEY5cKV2YK4U88knB80opvVf12t/XmJaO/wDX9fodfdTaKdC/tULaC6u7eKza1jVN0LqcSzBMcEoi4PHMjY5Bre1Kbw//AGxpkUOm6WNN/tOAx3YvrR8QbuQ8aRrJgrjPnFiMcnJJPmVFMVtLHdW3iCyhm8P6oYdLt7iLU5UnWC0i+S3BiKkpjtl8Ofm4PORTbyE6hrOswahLoXnT2jfYJIZbSOMnz0bJdCFVygfliGI471w9FLt8/wASr63/AK3v/wAA7vUrnS9Ik1ZtNGj3M0dvYpA4himQv5YErIrAgnOc5B5OTzU/h+/0ifSpryTSdLnvpbx2urWS6tbRBEVXaE89GwpO/wD1bKwz/u489oo6C7f10sPkKmVii7FLHC5zgeme9MoooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigCW4/4+pf98/zqKpbj/j6l/3z/OoqACiiigAooooAKKK09L0WTUre4upLq2sbO2KrJc3JbaGbO1QEVmJOCeAcAEnFAGZRWjFoeoXj3R0q2n1OC1P7y4s4JHjA5+Y5UEDg/eA6UQ+H9ZuLUXNvpF/LAQWEqWzspAGScgY6c/SgDOorVutDls/Dtpqc4uY3upWVIpLR0RkABDrIflbOSMDpj3qG70PVrCOOS/0u9tklcxxtNbugdh1UEjk+1HWwFCitDUNB1fSI0k1XSr6xRztRrm2eMMfQFgM1n0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBoW+pT6ZfzyWyWrsxKkXNpFOMZ7CRWAPuOaS11m5sxOIorJvtBy/nWEEuOv3dyHZ1/hxV3RdKsNY1S6t76+ubRkSWZDDarMGCIztnMiYOF465J7UWXhTUtXja40WH7RaNO0EMk8sUDSuADtCM/LkEHaCe+M4ND8wKEOq3EGmyWKR2hikzlnsoXkGfSQqXH4EUPqtxJpa2DR2ghXoy2UIl655lC7z+LVLDoN/NpjX+yGK2G7a1xcxQmTb97YrsC+Onyg88dac/hzU49N+3NBH5QjWVkFxGZURsYdog29VOR8xAHI9RRuBDdavc3dvBDLHZqsGNhisYYmOBj5mVAW/wCBE0+41u6uryC5lisVkgOUEWnwRof95FQK3/AgauXngzW7B9t7bwQkTCB915DiJyCQJPn+TIBILYB7VLrXhC40XxB/ZrXdlOrS7FkF7ApOBklh5h8v/gRFPdi6GcdbujqYvzFY+cF2hRp8HlY/65bNmffGa0rPXbO80m/0zXvMt47m4juo5rC1j/dyKCpHlAou0qx6EYIHXJqLUPDU58Uahpuk28qR2jEn7bPEvlIMcySBvLHJAznBJAHWmxeDtclnuYhaxp9mMYleS6iSMeYCUIdmCkNjggkHj1FJar+v63HsaWm6/o1pb6fFLNqS/wBkXr3Vs0ECL9qBKkB/3n7tvkAyN/B6cc6kHxBsUhhWSG7XalurIgXaNhnLAfN0zKuPoenGeDu7WexvJrS7jaKeBzHIjdVYHBH51DS+JBszo3v9E/4QqLTVutQN7Hcm6wbNBGWKKpTd5ucDbndt59BW9pniWHWfFzxRvOsmoeIba8gedgAiIXADHJwcMoAAI4x6VlzeBXj0a6ulupnuLGCOe7j+zARIHAbYshf5pArBiu0DrzxzRvdF0pPDb6tp+p3kuLhbdIrqxSHzDtLNtKyv90Yzx/EKpuzu/wCtv8kK142Xn/X4m940ik06z025htjYJFdTGOwvdNMLMx2lpdkssu9TgDnC8cDrXJnW7o6mL8xWPnBdoUafB5WP+uWzZn3xmtO28Mw3C6dDJctbzzW0t9eORuW3t1BK4XgliFJxnncnTrVqXwRHb65pdpdahLa2uqIrQST2mJgxcLsMQYgNkhuXA2nOc/LSSadv6/rRjbT1/r+tTCh1u6gv5rxIrEyzDDLJp8Dxj/djZCq9OwFNtdZubMTiKKyb7Qcv51hBLjr93ch2df4cVJZ6O134kXSkkAHnmJpSMBVUnc59AACT9Kv6Toek65rD2VtqU9s9xcNFYxtb+bleqmV8qFB45UN0JIHGUmmrob0eplQ6rcQabJYpHaGKTOWeyheQZ9JCpcfgRQ+q3EmlrYNHaCFejLZQiXrnmULvP4tXQad4Fk1HTVeO6k+3SWj3iQrb7oljBYLvl3DazlG2gKc8cjPGXd6Jb2/hm11aDUBcNNOYJYlhKrGwQNwxOW4bB+UDIOCRzTfn/WtvzEv6/MqXWr3N3bwQyx2arBjYYrGGJjgY+ZlQFv8AgRNN1HVLjU3RrmO1QoCB9ms4rcH6iNVz+NXNb0SDS7LTrm0v/tsd7G7bhCYwpVypxk5IyOCQp9hWPQAUVe0fT11PUlgmnNvCEeSaYJv8tFUsxxkZOBwMjJxVyTwvf/2zf2FsI5FsmxJcSypDFtJwrF3YKN2RgE854oAxaK6Ow8G3d9o9/ereaejWcyReW1/bhXJLAneZAAOOD0bseKrRaKh8J3mqSq7yRTxxxtDcwsiAlgd6bt4zgbTjB5oAxaK1pPDOrQ6ab6S2UQiNZWTz4zKiMcK7Rbt6qcjDEAcj1FO1bwrrGh27TanapEiSiGTbcRyNG5BIDKrErkAkZAyORRsG5j0V0tj4Wivp9IsRcPFfX0UlzKuN22PBKKqcFpGCkgZ53J061Rk0M3Gsvp+jfap2iVjN9ugS1aErndvy7KoHqzCjyAyKK6DRvDZu9ans73bMsEDyMtlf2zMx2Fl2EvtcAj5gpJAz3rn6ACiur0zwvbnwjca5qOyceYEhih1W3gKjYzEsG3EngYjwGPNZt3oyWvhOz1IrIZri4dC6XEMkW0KCF2qxdX5OQwHGKHpf+twWpjUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAG5ouq2Gj6pdXF9Y3N2zpLCghulhCh0ZGzmN8nDcdMEd6l0/xNFpk+mG2sXMOnak98iSTgs6sIwELBQMjy/vY5z0FLoFnpGoapdW2q217I4jnnR7a6SIARxu+0ho2znbjORjPQ1ds/DFnr2j2kmlSQ2E9zqM1tCt9cM7y4SIpGCiYzlm+bao5AJ6U3e/9d/8AMXr/AFp/kZkut2N7olvZalp07z2ayJbT290IwA7FwHUo27DMehXg496val41m1TQ47GaTVIpFhjgZI9SItGCYAJg2dSAM4bGecdqZY+Adav9BOqwoBEY5JUQxSneiZ3HeEMa/dbhnBOOnIzgWFsLzUra2JIE0yRkr15IHH504/FYcnb3mdP4v1+we/1qy0a3YJeagZri6e6WZZtrNt8sKqhVJYnqx6c+udq2taXrGsJqNzpt4ksp3Xix3qgSHaBlMxHZyM87vT3rW1Xwdp1paajPa3VwVWaM2TSEEGFn2EuFXJIbI4H8DcGqt58PdWstQsLWWSEfbzIIpJY5oFBRdzbhLGrDgjnGPfg4iOyaG97D73xdp17qupTtpFyLTVUAu4DfKX3KwZWjfyvlwQOCrZ5/Cnf+KFu7SW1isfJg8y2MI83cUSBXUAnHzE78k8DI6elrRfCVhf65DaXHiCwkglgklElsZckqrHbgxZUjbk5ABXoSah8P6JY3OvzWr3en6kiW8jRp5lxCszeWx+VvKyCuM4YKDjGead7L8fuELJqOjarceItX1eJRcXm97K1V5C8cruGDbgApUDIOTk9h3HM10Hhvwdf+KY5Tpsib43CbGgnbJI4y6Rsi59WZfy5pbfwfdXGlx3a39ikk1tNdRWjO/mukRYP0XaMbCeSM9snICtb5BuW7/wAcPfaUYntZPtz2a2TTm4BiWMbdxSIKMOwRQzFjnngcYzLnV7XUJdJtbiCS20yxRY3jhId2ycyvzgFmP5AKO1Y1SQiJp4xcO6RFhvZEDMq9yASMn2yPrVdb/wBf1qLpY3rTxdcWnjCXXFi3LJvjMG4DbEV2hFJBwVXGDg4Kjg9KnHiyyOtaddTaddyWumnzIIjfAyvKZPMZ5JDGd2TnICrxjnjmc+FdPn8TW9tafbfsLaauoSJuV52Hl79ikKBknCjg4z3qHXvCBtNS0q30tXL6kNgtnnWZoJQ+1kZ1VVOOCeBjkHpmhXTS6/8AD/8ABG7NPt/wxVfXNPjbV7nTra6t7q+XyoxLMsoiRyTKdwVeSMKBt6M3NLoevaZpWkXVtcaXdSXV0drXlterC6xYwYxuifAPcjBI46ZB1rPw1pGp3OoXdtBcy6fb3CWkKwXCw5AQl7iSSQOEXCFsY6uAMYxUVt4X0mPxddeH76S9mdZXCXkDrHHBCE3CZwVYsMckZXAHU54lWSsu34f0/wA/Meu77/j/AEiK38cmDSbW2NpM89hHJFZyfaQI0DhgGdAmXdQ7ANuAHHHXNGTWtKfwlHo6aZeLMkpuBcG+QqZCqqfk8r7vy8DdkepqDSrG3/s3UtSv4/Nt7ePyYRkgPO+QnQg8AM//AAEA9au2Oi6Xqnh24mtBeQ3lu0CCeeRfJnlkbHlqgXKkDJB3HIQnA7Va7t3t/X9eQtvl/X9fMi1XWdJ1LSNP0+00+7s2styRzz3yyrtZyzFlWFSeT2PTsareIzo/9pRJoC4gjt40lcM5WWYL87rvwwUnoCB9B0rodd8F6dpumXFzHJeW4srpIZjM6SPcRFihmSIBSg3KdoZjuHfjNVW8P6Ivi7TrN554NNu7JLlmuLqNGUtEXC+YVCjLYGSO9To1fz/T+vmG33fqZGia/JoVvfi1t4XuLuNYRLNGkqom4Mw8t1KtnA69MVqTeMbfUIZodX0syx3UMC3BtZlt2aSHcEdMRlVGxtpXaemQRWV4i0waXqEccdlNaRSQrJH5t5HdCQHPzLJGqqw4xxnBB5rJp3uGxt6drNhaW+pWNxYXM2n3rIyxpdqksZRiV+cxkHhiD8oz7VJYa3pNp4cvdMm0y9lkvGR2mS+RApQtswvlH+9zzzjjFWNC0Gy1HQ5bpbe71W/WQqbCyukiljQAYk2FHaQEk/dHy7TnrxnJoLLo8eoXuoWlks6u1vDN5hknCnB2hEYD5gQNxXkH0zQ+wLXU0LrxXb3ENxOumsmp3dqlrcXBucxFFCjKx7QVYhF5LEdcAZGEn8TW2pT6jHf2ssVrqWqR30xhcM8aDflFBADHEnXI6VXvNNtofBVlfQi2lmlu3SSeOWXevyKfLZGQKMZzuUnOcdqqPoGo2wtpNUtZ9MtbkgR3d5byrEQRnIIUkjHPANPrr/WzDpp/XQfd6rban4hmv9Vtp5beRjiC3nETIoGEUMUYYUADp0FbE/jaO4uEjmsJ57D+zzYOs95vuHQvvB87YBkMBj5MADGKk8U6Ro+m6tZ6VZz6XGqLGZroG7MnMasTJlSuGJJHlqSO+KzNa0Vj45uNH020jhZrkQwwRTNKq5xgB2AJHPUgUu0f6/rUPP8Ar+tB+i63o+ja7Jfx6XfSxBGSGJr9AybkKtubyfm+8SMBce9UItbvdOkuU0G91DTrSc8wpdnLDphyoUN1PYVvSaf4YW11HUXt76Wytr6KyhFrcrGXUo26U70fJJTO3gfN2qG78EG1vbpJda0+2tobv7LHPdmRPMYqHX5VVsfKwyTwOcnpk/r+vvD+v6+4xhquPDL6R5P3rxbnzd3TCFduMe+c5q7JrWlt4RTR1028EyTG4Fwb5SvmFQp+Tys7cL03Z9zUth4K1HU9EudTs5I5I7ZZGkURTEYjGW/eiPyugyPn5+pAqxefD/ULLTZryS/09vJRnaFJHL8IrkfcxnY6nrjnGc8UPZ38v+B+QLdW/r+rnKUV0Or+DdQ0fQ4dWmdJbSV1QMIJ4sFlLLjzY03AgHlcj8xXPUdbB0uFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFAF+21CXTNUnuLdUZ2SaEhwSMSIyHoeuGOPep9N8RXel/2d9njhb+zrxryLepO5yEBDYPT92OmO/Na+l6TpN3oF3cakVhnN9tiuHl2gIg3OmM4JKk44ySAB1q5PpemQ3vieKxjjiMVis0ME1t5yxxny2ykpkDK2WwDtbjPPND0b8l/wQWqXnp+hzz+IDcaVHZX2m2V20KNHBcy+aJYVYlsDa4UgEkjcD19OKzrK7ew1C3u4lV3t5VlVXztJU5AOMHHFbFr4dhuPC8mqJdTzzoHLW1pbpL5Kr/FKfMDIp/vbCvTnJxRd+HYbfwxDqkF1Pdu6q0ot7dHhtyTjbJIJCyN7MgyemetGzuHxEGm+Jr3StQuLy1SAy3EqStvQkKySiQYGf7yjr2/OrcvjO6ZrT7Np1haR2kk0kccKyEFpVCuWLOSenHPH04rP8N2kF/4q0qzu08yC4vIopUyRuVnAIyORwe1dJqPh/TNRbSv7Jjt0FxPPDcTaWZHjGxVYfLcurBgCSxJVMYOeDRbRIL6t/11/wCCcppOpzaPqkN9bKjyRE/JICVcEEFTgg4IJHBHWtHTfEselavJqFpoWmhmQokTNcFIgVKtt/e5OQTnJPtiteDQ18N+N9ChjmtdStdRaI/v4IJlKNKUYEBpEz8p5VifcHIqlpvhyDWda1RZp3sre3nKiREhEakuQFJlljA6cAEk4PHFG7SXn+H/AA4bXv5fiN0zxpNpPlC10jTStvdm7tlkWVhbuQoO395yMKPvbiOxFUofEt5A1uUjgP2ezms0yp5SUyFieev71sfQcGqer6c+ka1eadK6yPaTvCzr0YqSMj8qp0rpr+v62HqtDYu9Q00+FbPTrW13XqTvPPdvCqMAVAEQIJLqME5OOvA7nLhkWKeOR4kmVWBMbkhXHocEHB9iD716BqPhPSrbRbyBooIbq206O8gnEsjTXBwjOzLu2LGd5VflDEgcnBzg6vbacPCdvdjS10u8luALVVld3uLfad0jhmI+8AAyhQTuwOOG9G/68v0EtUv68wk8bXP9p2d/aabY2U1rD9nBgM2JIdmzy23SHjaSMjDd85qH/hK3MpkWwggENm9rZRW7MqWu8nc43FmZiGfktnLA9gK2NO0K1n1ax0SWzS4nsrKW8uo1YK1xMU3rCXGCFACA88fP061NNougweIvD7C0gu7fUyIZYLWeVbdZBKEZlZiXZME/xDLDIO3gu13bv/wf+D9/mK9lft/wP+B/SOX0jxBNpNpc2bWtvfWdyyPJbXJk2F0J2t8jKeMnjODnkcDF+LxrcfZ9QivtM0++Ooz+dcyzecjv3CZjkT5AeQvTOPQYr6dpdvceLJoZl26fZySTXHPSGMkkAnuQAo9yKv8Ah3+ztX1W6fU9FgNm0jz3l0HeNbKI9PLVCqg5OAGDbjtAHrKfMk/L+v68imrO3n/X9eZiXmqLcaTaWFvbC3igd5ZMOW82Rj156AKFUDnoTnmr134pN5otppzaRp8Qs49kE0TTq6NnJfHm7C5I5JU549BjpdL8J6TNo9hHeRQo+o2Uk8d48snnNL85VY0VtoRQgLswPUgHOMc9cWmly+C7C9htDbTfb2tp5zKztIojVicfdHLHAA6YBJPJe11/W9hdn/W1xupeMbrVVcXVlZ5uJ0nvWXzM3jIMDed/A5PCbRz7DDNS8TR6pdWk1xoWmqLWNYhGjXAWRFXaqt+9zgeoIPqTWx4k0LTIvD95fafFYRJa3scNtJZ3pna5icPhpQXYK/yA4AQ8tlemOJpeX9bDOjtfEdtdeItOu9atY007TlVYrC2txJHsU7vLxI+SGJOWYseeh6VhXUyXF5NNFCsCSSM6xJ0QE5Cj2HSt3wvpen6hp+qtqIVHCRxW08kvlpBK5O1mOcY+XBzwASa0NX8K2d3HFN4cyHMNti2wW84SO0fmhic/fVQRjAL/AIU7bf1v/X9aivv/AF/X9eRh6PryaM0U0Ok2M95DJ5sN3OZi8bDlSFWQIcEZGVPvmnN4jkuNLWy1Gws74xeZ5FxN5iyQ7zuOCjqD8xLDcG5J7cVoW3hOyu31IWuqT3ptJjFDFZWqSzTgDmQRmVW2Z7ru45IFIuleH/8AhAYdRmub1L5ruSIslorAkRqQnMo+XJzuxnk8cUm9L+n4gt7f1oUX8RK/htdG/sewWNXMgnDT+Z5hAUv/AKzbkgDjbj2rFrqtQ8GRadoJvLjV7db1beO4No0kIyHCkKoEpkLYYHBjA4PPQlLvwzotpq66ZL4hlW5FxHFKXsMRqr9WDeZztyMghe+Cccu3veYdPIybrWnv9c/tO/s7a4YhVaBt6xsFQIM7WDdADw3X8q0Lnxd9r1e71VtKtbe+uIHiWS2eQBXbgyYdm527gMEAZz2qtfeHJrC3tkmdvt9zdSQJaBOdqNs35z3fcoGP4TzWzbLpX/Cdafocml2d9apJDYSyMzqXffiSQNGy5JZmALZ4C0b2B+7r2MXSfER0vT5bKTTLHUIJJ0uNt2JDtdAQD8jrkYY8HINQ6hr99qltLFfMkjTXTXbybcMXZQp6cAYHQCt2zt9H1XRdUlu4IdIjjvbWJDZwPOwyJgQvmSZ5wCfnAwvrgGCXwpp+ntef21rMlsltqT6fut7PztxXnfguuF9ep6YB7D8/62/4A7Wdv66/8Er2fjG6s9Lis1sLGR4baa0juZEfzEil3bgMOFz8552598cU+48calcwyxPBaAShwxCNxuijjPVvSJT9SfpSW9paHwNqssEkU08N1CHaSzG5VJcL5cu/IBxkgoO1F2y3Hw7spnt7ZZotQkgEsdukbsgjQgMygFuSeWyaG9G/T8f+HF1S9f6/AbrPi+51qyubeWwsbb7XcrdXEkCvvlkUMMks5x948DA9AOa56uvvrB9ft/CcNvDaQXeoK8TSRW6Qqx84qGYIoBwO+M8UTeCrMapY2ttr0EqXTSK5zDI8OxN24rDLINp6feB4PHqbBuchRV7U7fTYGhOk3814jqS4ntvJeNskYIDMCCMHIPfoKo0AFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAXLm+uDbvYF/9GW4aYJtH3yME569AOOlaFt4v1i1ado5LV2uEWOVprCCUugVVCksh+XCrx04z1q14fvtNtpL+C7EMF7PIBbXlxZJdxR4JyrRsDgE7fnVWYY4HJqe88PW2i217eeJIZ7qVNRksjFp0yQRoyqGLbjGwwd3ChR0PTGKHp/Xp/wAN/wAAF/X5mNB4i1C2spLW2NrEkqurSJZQrLtbO4CQJvAIJGAenHTikbX79tKbTlNtFbsqo/k2cUbyKCCA0iqGYZAPJOSAa0BY6DaeH7C61FNRe4vkmIaCaMJCVYqp2lSXycZGV7884F3VfDmg6ZoqLJqbf2u9rDcRxguwlMgVtgXyQoGGPzea2dvTnAA6nLWd3Pp99BeWj+XPbyLLE+AdrKcg4PB5HetM+LdY+2W9zHPDC1uH8tIbSGOL5xh8xqoRtw4OQcgD0rrl+H+kSvbx+fcQypfpZXsaTmYxs0bsQCYI1BBToC4Oeo4JxvE3hvS9P0a0u9IF95kzQbkuJFf/AFsIkAG1RyM4z39B3P6+8F/XyMv/AIS7WDqVtftNbtPaRiK33WUJWFQ24BUKbVwTwQMjtSx+L9ZiuLiaKW1RrlleRVsYAhdc7XC7NqsMn5gAeetZFzbT2dzJb3kEkE8Z2vFKhVlPoQeRXXeELeyi8O3+p3H2XzIbuGKQz2qXLCMqx2xxuCpd2UDJ6AHkc01rr/WrB6GXa+Kp4Idbknja4v8AWUaOed2UIFZgzHYF+9kcHIAz0rArvrm00601bxhplrp1qIbe3kmjd03yQsHjGwMc7dpLDjBPcnAxz+lH+yvDl9qhOJ7oGwteoOCMyuPopC/9tPap8/Jfr+o/Lz/r8CtJ4l1WXSxp73CGDYsbHyIxI6KcqjSbd7KMDCkkDA44FWbrxjqeo3cNxqcen3bRSI/z6fChfZjarOiqxXAAxnpXX6lpWkQ6Ff2RS1YW+lQ3ds0FsgeMkRnzJJsbmaRnICZIAPbAFc9rzKnhu2ttSsLO21WSdZbeG1t1jeC3KcCTaMsWJUjeS2ASfvDNO6f9d/zEtV/XYwY9YvotYbVY5yLx5GkaQqDuLZ3ZB4IOSCCMEHFW18V6smqRagJLY3EEYjhBsoTHCoO4bIymxDnnKgHJPqa0r37Rbatpfh/TLWO+uLAFTC0fmLJdScuSp4O07VweP3fIIyK3LaHSrvUL+df7KS903TI/tM4to2tRL5oWSVYguxyqMFAC4ZuR2NLZaf1/X6hu9f61/r7jjrjxFe3UN8ksdqHvynnyw26REqpztAQBQCcE8ZJUc0un+J9T0zTH061a1a0eXzmiuLGCcF8YB/eITwPyyfWusurWK38W+bpFjZQ2clpb3d9LqFnGyWqMAWyhBRC+VO1RnJCp6Gl4ZvNKu/FlzZRW0Qs767ZbS0n0+KbcrkhVaY5khA+XlAxHJ7UbaL+rB5v+ro5+LxNqsGnvZRXEawsroCLePeiOcsiPt3IpycqpA5PHJpX8TalJoo0lvsf2NeiCwgDA4A3bwm7dgDLZyfWqBsrnyJrhbeRreFxHJMikxqxzgFunODj1pLFQ+oW6uAymVQQRkEZFOK5nbuKT5VfsWrzW7vUY4YLwxi1ibd5FrBHbqT0LYRQC2ONxBNTeI9dbxBqUVx5PkRwW8dtEhYO2xFwCzADc3qcD6V28nhnQtS1LX9P06Z0mbV4oMyWCRi1BkkBWIhySDjGMLnA/DDs/Dmi6o9hcW6alZWs1zPbzRzyJJJ+7i37lYIo9ipHHrzxKd1f+v61Kas7f1/WhysV9cQ2NxZxvtguCjSrtB3Fc7ecZHU9K3NG8Tf2XDJdST3EmoQ2jWdlGsSCKNGJO5mzklSWIG3rg7uMU6wsvDmpXE8sUOqQ29rYyXEsLXEbuzqwACybAMEHuvB9elOh03w/JptxrCwapLZJNDbLaLPGJUd1JLNJ5ZBX5SB8gJz2xy/L+tdP+ALrf+u5k6Zr9/o6Eaf8AZkbdvWV7OGSRD6rIyll/AjB5ptprl9ZWE9lE0L287b3jnto5sNjG5d6na2D1XB/KuhvPD2haGLt9X/tK6WHUms1FvKkLBAobcdyt8wzjbxk9xjnO04rpWg6jqkbHzLotYWe4YbaRmV+PRCF/7ae1K+j/AK7W/QP6/P8A4JSuNf1C701LG6a3mijRY0d7SIzKq9FEu3fgdMbunHTioXuxqerG51m5lAmbM00MKu3TsmVB7dxW9darK/geyc2umrJNeT27yppturlFSEqNwTIOWbkHPPWtfxFoek6n4g1K4gN7HMuvpZ3BeRCsglZySihcrgrjktnrx0qra/15f5i+z/XS/wDkYGpeLZrjxUNXtIlxbx+TaLcDcY1ClVc4wC+SXz03HPNYdpeT2F9BeWr7LiCRZY3wDtYHIODweR3rYvx4es9SSOzt9UJtrl0mElzH+9UcKykR/Icg8EOMd625bq8sPjXm3v7rzZNSjjkm3hHkVmXIbYFBB7gAD2pQ95q3X+v1HL3U79Djo9QuorWW2jlxFNKkzrtHLpu2nOO29vzqa+1m/wBSWYXs/mCe5a6k+RRulYYLcD9OldJ4WvLm3+IF7BBcSxRXH2tZo0chZAI5CAwHXB55qHQfD2hTeHo9T8Rak1olxdPboVdx5e1VJbCwybz8/wB0lOnXniU+aN/K/wDX3IctJW/r+tzIs/Euo2Okyabb/Y/ssv8ArFksIHZ+uCWZCxIycHPHbFDeJdRfRBpLfY/sa8hBYQBgcAbt+zduwAN2cn1q8dP8P2Wh2VxfjUZ5r1Z9slvIiJHsYqh2MpLAnGRuXHqc8c3Vbi2Nq58WavdW9rC8ltGtowe3a3sYIXhIO75WRAw554PJqOfxLqU99HeE2sVxHvxJb2UMJO4YbdsQbuCeuetZNFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQBp22uatpE9wuk6pe2KySEuLa4eMMQTjO0jNR2Ot6rpkksmm6neWbznMrW9w8Zk/3iDz1PX1qrcf8fUv++f51FQBJJcTSxxxyyyOkedisxITJycDtk81aOt6qdLGmHU7w2A6WhuG8rrn7mcdeenWqNFAGnL4k1yfy/P1nUJPKIMe+6c7CAQMZPGAT+ZqKLVrkSwm7d72GJlIt7iWQxnaNqj5WBGBwMEYHFUaKd+oF3V9Vutb1a51LUHD3Fy+9yBgewHsBgfhTdP1TUNJmabSr65spWXaz20zRsR6EqRxxVSiktNEG5pWPiLW9MieLTdYv7ON3LulvdPGGY9SQDyeBzVe61K7vYbeK6mMiW4YRggDG5izE46kk8k5PT0FVaKALjavqT6dHp76hdNZRNujtjOxjQ8nIXOAeT+dXH8W+IZXha51q+uhDKsqJc3DTIHU5B2uSpx7iseigC1b6lfWmoG+tLy4guyS32iKUo+T1O4HPOTVmTxJrkt9Fey61qD3cKlYrhrpzIgPUBs5A+lZlFAGnbeI9cs5557PWdQgmuW3zyRXTq0rerEHk8nrSf8JHrfk3MX9sah5d2xa4T7U+JiRglxn5iQMc1m0UAaUeuXEHh2fR7eOKKC5lWS4kXdvm252g5O0AEk8AH1JrOVijBkJVgcgg4INJRR1uBZOoXjNMWu5yZ5BJMTKf3jgkhm55OSTk+tTXWuatfXaXV7ql7cXEalEmluHd1U5yAScgcnj3qhRQBJFPLAHEMrx+YhR9jEblPUH1HA4qfT9V1HSZWl0q/urKR12s9tM0ZYehKkZFVKKAJWuZ3hMTzSNGXMhQsSu48FsevvUlxf3N1a21tPJuhtVKQoFACgsWPTqST1PPT0FVqKAJDPKbdYDK5hRi6x7jtViACQPU4HPsKmOp3xd3N7cFpJhO7ea2WkGcOeeWGTz15NVaKALFvf3dpei8tLqaC6ViwnikKuCep3DnPJq6fFPiBrxbxtd1I3KoY1nN5JvCk5Khs5xntWVRQBqp4p8QR3ct1HrupJcTKFkmW8kDuB0BbOSBnimweI9ctZ7ia21nUIZbo7p5I7p1aU+rEH5uvesyigCR55pYo45JXeOLPlozEhMnJwO2TzUdFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAFFFFABRRRQAUUUUAS3H/H1L/vn+dRVoW8mnR3851W1urmMk7VtrlYSDnqS0b5HtgUlrNpCCf7bY3sxY/uPJvEj2Dn72Ym3dum2gChRV2GXS102RLizu3vTny5ku1WNfTMZjJP/AH0KHl0s6Wscdndrf/xTtdqYjz2j8sEcf7ZoApUVeupdKe3gFlZXkUy4855bxJFfjnaoiUrz6lqfcTaM15A1pYX0Vsp/fRy3yO7j/ZYRAL+KtQBnUVombRv7TDiwvhY7cGA3yeaW9fM8rGPbZ+NEM2jLfzPcWF9JaEfuoo75FkQ/7TmIhu/RRQBnUVftZtIQT/bbG9mLH9x5N4kewc/ezE27t0202GXS102RLizu3vTny5ku1WNfTMZjJP8A30KAKVFXXl0s6Wscdndrf/xTtdqYjz2j8sEcf7ZpbqXSnt4BZWV5FMuPOeW8SRX452qIlK8+pagCjRWjcTaM15A1pYX0Vsp/fRy3yO7j/ZYRAL+KtQZtG/tMOLC+FjtwYDfJ5pb18zysY9tn40AZ1FaMM2jLfzPcWF9JaEfuoo75FkQ/7TmIhu/RRTbWbSEE/wBtsb2Ysf3Hk3iR7Bz97MTbu3TbQBQoq7DLpa6bIlxZ3b3pz5cyXarGvpmMxkn/AL6FDy6WdLWOOzu1v/4p2u1MR57R+WCOP9s0AUqKvXUulPbwCysryKZcec8t4kivxztURKV59S1PuJtGa8ga0sL6K2U/vo5b5Hdx/ssIgF/FWoAzqK0TNo39phxYXwsduDAb5PNLevmeVjHts/GiGbRlv5nuLC+ktCP3UUd8iyIf9pzEQ3foooAzqKv2s2kIJ/ttjezFj+48m8SPYOfvZibd26babDLpa6bIlxZ3b3pz5cyXarGvpmMxkn/voUAUqKuvLpZ0tY47O7W//ina7UxHntH5YI4/2zS3UulPbwCysryKZcec8t4kivxztURKV59S1AFGitG4m0ZryBrSwvorZT++jlvkd3H+ywiAX8VagzaN/aYcWF8LHbgwG+TzS3r5nlYx7bPxoAzqK0YZtGW/me4sL6S0I/dRR3yLIh/2nMRDd+iim2s2kIJ/ttjezFj+48m8SPYOfvZibd26baAKFFXYZdLXTZEuLO7e9OfLmS7VY19MxmMk/wDfQoeXSzpaxx2d2t//ABTtdqYjz2j8sEcf7ZoApUVeupdKe3gFlZXkUy4855bxJFfjnaoiUrz6lqfcTaM15A1pYX0Vsp/fRy3yO7j/AGWEQC/irUAZ1FaJm0b+0w4sL4WO3BgN8nmlvXzPKxj22fjRDNoy38z3FhfSWhH7qKO+RZEP+05iIbv0UUAZ1FX7WbSEE/22xvZix/ceTeJHsHP3sxNu7dNtNhl0tdNkS4s7t7058uZLtVjX0zGYyT/30KAKVFXXl0s6Wscdndrf/wAU7XamI89o/LBHH+2aW6l0p7eAWVleRTLjznlvEkV+OdqiJSvPqWoAo0Vo3E2jNeQNaWF9FbKf30ct8ju4/wBlhEAv4q1Bm0b+0w4sL4WO3BgN8nmlvXzPKxj22fjQBnUVowzaMt/M9xYX0loR+6ijvkWRD/tOYiG79FFNtZtIQT/bbG9mLH9x5N4kewc/ezE27t020AUKKuwy6WumyJcWd296c+XMl2qxr6ZjMZJ/76FDy6WdLWOOzu1v/wCKdrtTEee0flgjj/bNAFKir11LpT28AsrK8imXHnPLeJIr8c7VESlefUtT7ibRmvIGtLC+itlP76OW+R3cf7LCIBfxVqAM6itEzaN/aYcWF8LHbgwG+TzS3r5nlYx7bPxohm0Zb+Z7iwvpLQj91FHfIsiH/acxEN36KKAM6ir9rNpCCf7bY3sxY/uPJvEj2Dn72Ym3dum2mwy6WumyJcWd296c+XMl2qxr6ZjMZJ/76FAFKirry6WdLWOOzu1v/wCKdrtTEee0flgjj/bNLdS6U9vALKyvIplx5zy3iSK/HO1REpXn1LUAUaK0bibRmvIGtLC+itlP76OW+R3cf7LCIBfxVqDNo39phxYXwsduDAb5PNLevmeVjHts/GgDOorRhm0Zb+Z7iwvpLQj91FHfIsiH/acxEN36KKoSFDIxiVlTJ2qzbiB2BOBn8hQA2iiigCW4/wCPqX/fP86ioooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigD/2Q==)

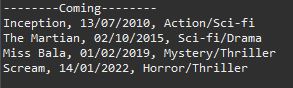
***Test Case 2:***

*User Input*

The user selects add movie option to input a new movie to add to the list.



*List before user adds movie*

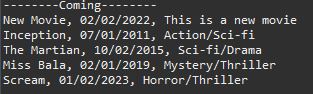
**

*Output Console*

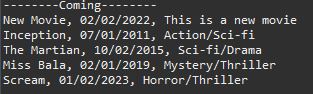
The user added movie is added to the showing or coming list depending on the dates entered by user.

*After user inputs new movie*

Expected output:



Actual output:



**-Team Contributions-**

**Tu**: Implemented the Movie class and Movie\_List class and wrote some function in the main class Program. Modified the Movie\_List, so it could work easily with this project. Wrote all the functions in the Movie\_List. Changed add function, so whenever a movie added to the Movie\_List, it would add and sort the movie to the ordered array in non-decreasing order. Changed indexOf function to indexOfName and contains to containsName, so it would be easier to search a name in the array. Wrote hasReleaseDate, displayReleaseDate, searchIndexBeforeDate, displayBeforeDate, updateDescription, updateRelease, toString, toFile. Added iterator and used it in Movie\_List to get movies from the array. Wrote printDash, menu, backToMenu, capitalize, editRelease, editDescription, showRelease, showBeforeDate, getDate, display. Modified Joel’s addMovie, so it could work better with other functions. Handled invalid inputs and errors for all my functions.

**Kyle**: Worked on file input code and file input format. Created input file text document. Wrote input file overwriting code and displaying movies in menu with switch statement. Helped with menu functionality. Contributed to Program class. Wrote docstrings for Movie class. Responsible for creating the report and UML class diagram along with both test cases. Created and managed GitHub repository.

**Joel**: Contributed to menu functions. Wrote the add function for adding movies to the list through the menu. Helped organized Program class code.

**-Future System Improvements-**

Improvements that could be done to this system in the future include:

Adding more value to the Movie class, for example, displaying what movies are showing in local theaters, add a url for movie trailers, making a gui for the user to interact with. This system could also be made into a website and over all a larger database.