90 pts

Name: _____

Class Day / Time: _____

Due Date: _____

Assignment #3 – Movie List
Intro to Linked Lists

Write a program that allows a user to track their DVDs. Use an input file which includes the following attributes for each movie:
- Title
- Leading actor/actress
- Supporting Actor
- Genre
- Alternate Genre
- Year
- Rating
- Synopsis

Requirements
- The user should be able to enter in the name of the input file.
- Using a structs and pointers, create a **linked list** of the movies in the input file.
- Next, output the linked list to an output file.
- Format the output of the plot such that it will **word wrap** (you will need to write a function to implement this) – see the sample output for an example.
- You will need *at least* 4 functions (one for each of the following tasks: *print header*, *create the linked list from the input file*, *output the linked list*, and *word wrap the plot*). You may need more.

Turn in (IN THIS ORDER)
1. The first page of this assignment
2. Output File (see next page for an example) – print with the line numbers!
3. Screen IO – cut and paste into a txt file into eclipse.
4. Header file.
5. Listing of main.cpp
6. Listing of your functions in a separate file from main.cpp.

Input File: a link to the input file is provided on the class website.

Sample Output File: Your output file should be formatted as follows:
(**NOTE:** this is not the entire output file… just a portion is provided as an example)

```
**********************************************************************
MOVIE #: 1         Title: Antwone Fisher
----------------------------------------------------------------------
Year: 2002         Rating: 7
----------------------------------------------------------------------
Leading Actor:     Denzel Washington      Genre 1: Biography
Supporting Actor: Derek Luke              Genre 2: Drama
----------------------------------------------------------------------
PLOT:
Antwone Fisher, a young navy man, is forced to see a psychiatrist after a
violent outburst against a fellow crewman. During the course of treatment
a painful past is revealed and a new hope begins.
**********************************************************************


**********************************************************************
MOVIE #: 2         Title: Bagger Vance, The Legend of
----------------------------------------------------------------------
Year: 2000         Rating: 6
----------------------------------------------------------------------
Leading Actor:     Will Smith             Genre 1: Drama
Supporting Actor: Matt Damon              Genre 2: Drama
----------------------------------------------------------------------
PLOT:
A down-and-out golfer attempts to recover his game and his life with help
from a mystical caddy
**********************************************************************


**********************************************************************
MOVIE #: 3         Title: Cinderella Man
----------------------------------------------------------------------
Year: 2005         Rating: 8
----------------------------------------------------------------------
Leading Actor:     Russell Crowe          Genre 1: Biography
Supporting Actor: Renee Zellweger         Genre 2: Drama
----------------------------------------------------------------------
PLOT:
The story of James Braddock, a supposedly washed up boxer who came back to
become a champion and an inspiration in the 1930s.
**********************************************************************


**********************************************************************
MOVIE #: 4         Title: Five People You Meet in Heaven, The
----------------------------------------------------------------------
Year: 2004         Rating: 7
----------------------------------------------------------------------
Leading Actor:     Jon Voight             Genre 1: Drama
Supporting Actor: Ellen Burstyn           Genre 2: Drama
----------------------------------------------------------------------
PLOT:
On his 83rd birthday, Eddie (Voight), a war vet and a maintenance worker
at the Ruby Pier amusement park, dies while trying to save a girl who is
sitting under a falling ride. When he awakens in the afterlife, he
encounters five people with ties to his corporeal existence who help him
understand the meaning of his life.
**********************************************************************
```

```
********************************************************************************
MOVIE #: 5          Title: Good Night, Good Luck
--------------------------------------------------------------------------------
Year: 2005          Rating: 8
--------------------------------------------------------------------------------
Leading Actor:    David Strathairn         Genre 1: Biography
Supporting Actor: George Clooney           Genre 2: Drama
--------------------------------------------------------------------------------
PLOT:
In the early 1950's, the threat of Communism created an air of paranoia in
the United States and exploiting those fears was Senator Joseph McCarthy
of Wisconsin. However, CBS reporter Edward R. Murrow and his producer Fred
W. Friendly decided to take a stand and challenge McCarthy and expose him
for the fear monger he was. However, their actions took a great personal
toll on both men, but they stood by their convictions and helped to bring
down one of the most controversial senators in American history.
********************************************************************************


********************************************************************************
MOVIE #: 6          Title: Invictus
--------------------------------------------------------------------------------
Year: 2009          Rating: 8
--------------------------------------------------------------------------------
Leading Actor:    Morgan Freeman           Genre 1: Biography
Supporting Actor: Matt Damon               Genre 2: Drama
--------------------------------------------------------------------------------
PLOT:
Nelson Mandela, in his first term as the South African President,
initiates a unique venture to unite the apartheid-torn land: enlist the
national rugby team on a mission to win the 1995 Rugby World Cup.
********************************************************************************


********************************************************************************
MOVIE #: 7          Title: Miss Petigrew Lives for a Day
--------------------------------------------------------------------------------
Year: 2008          Rating: 7
--------------------------------------------------------------------------------
Leading Actor:    Frances McDomand         Genre 1: Comedy
Supporting Actor: Amy Adams                Genre 2: Romance
--------------------------------------------------------------------------------
PLOT:
Guinevere Pettigrew, a middle-aged London governess, finds herself
unfairly dismissed from her job. An attempt to gain new employment
catapults her into the glamorous world and dizzying social whirl of an
American actress and singer, Delysia Lafosse.
********************************************************************************
```

```
******************************************************************************
MOVIE #: 8          Title: Pay it Forward
------------------------------------------------------------------------------
Year: 2000          Rating: 7
------------------------------------------------------------------------------
Leading Actor:    Kevin Spacey          Genre 1: Drama
Supporting Actor: Helen Hunt            Genre 2: Romance
------------------------------------------------------------------------------
PLOT:
Like some other kids, 12-year-old Trevor McKinney believed in the goodness
of human nature. Like many other kids, he was determined to change the
world for the better. Unlike most other kids, he succeeded.
******************************************************************************


******************************************************************************
MOVIE #: 9          Title: Pianist, The
------------------------------------------------------------------------------
Year: 2003          Rating: 9
------------------------------------------------------------------------------
Leading Actor:    Adrien Brody          Genre 1: Biography
Supporting Actor: Thomas Kreschmann     Genre 2: Drama
------------------------------------------------------------------------------
PLOT:
A Polish Jewish musician struggles to survive the destruction of the
Warsaw ghetto of World War II.
******************************************************************************


******************************************************************************
MOVIE #: 10         Title: Pirates of the Caribbean 1: The Curse of the ...
------------------------------------------------------------------------------
Year: 2003          Rating: 8
------------------------------------------------------------------------------
Leading Actor:    Johnny Depp           Genre 1: Action
Supporting Actor: Orlando Bloom         Genre 2: Action
------------------------------------------------------------------------------
PLOT:
This swash-buckling tale follows the quest of Captain Jack Sparrow, a
savvy pirate, and Will Turner, a resourceful blacksmith, as they search
for Elizabeth Swann. Elizabeth, the daughter of the governor and the love
of Will's life, has been kidnapped by the feared Captain Barbossa. Little
do they know, but the fierce and clever Barbossa has been cursed. He,
along with his large crew, is under an ancient curse, doomed for eternity
to neither live, nor die. That is, unless a blood sacrifice is made. Full
of edge-of-the-seat action and swashbuckling adventures, this is a movie
you won't want to miss!
******************************************************************************
```