This document has been created to help you organize the screenshots you need to capture to demonstrate the completion of your project. When you are done with all screenshots, download this document as a PDF file and upload it to your <u>final project repl</u>.

Menu-driven User Interface:

In the following space, capture screenshot(s) that demonstrate your program has a nice menu-driven user interface that allows users to repeatedly choose different options until they are ready to exit.

```
Classet 7 - pthread - etdec++27 - o main library.cpp main.cpp

./main
Micross. This program deals with data about top otoms games.
The source is: https://m.atwiki.jo/ggitluriage/sp/pages/14.html#IdA-1

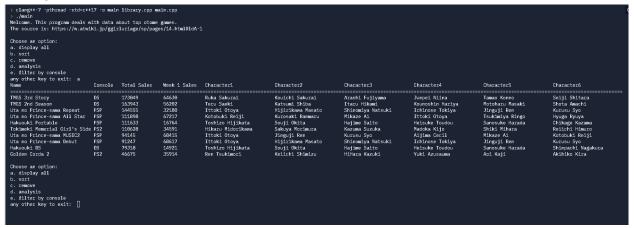
Chose an option:
a. display all
b. sort
c. remove
d. analysis
e. filter by console
any other key to exit:
a
Console

Total Sales

Week i Sales
Character
C
```

Tabular Display of the original data:

In the following space, capture screenshot(s) that demonstrate your program is able to display the original collection in a nice tabular format.



Filtered display:

In the following space, capture screenshot(s) that demonstrate your program is able to request necessary data from users and display a portion of the original collection according to the user

entries.

Choose an option: a. display all b. sort c. remove d. analysis e. filter by console any other key to exit: e Please type in the console yo Name			y (ex. DS, PSP, Week 1 Sales		Character2	Character3	Character4	Character5	Character6
TMGS 3rd Story TMGS 2rd Season Hakuouki DS	DS	173649	64630	Ruka Sakurai	Kouichi Sakurai	Arashi Fujiyama	Junpei Niina	Tamao Konno	Seiji Shitara
	DS	163943	56202	Teru Saeki	Katsumi Shiba	Itaru Hikami	Kounoshin Hariya	Motoharu Masaki	Shota Amachi
	DS	79318	14921	Toshizo Hijikata	Souji Okita	Hajime Saito	Heisuke Toudou	Sanosuke Harada	Shinpachi Nagakura
Choose an option: a display all Please type in the console you Name			(ex. DS, PSP, Week 1 Sales		Character2	Character3	Character4	Character5	Character6
Tokimeki Memorial Girl's Side	PS2	11 0 628	34591		Sakuya Morimura	Kazuma Suzuka	Madoka Kijo	Shiki Mihara	Reiichi Himuro
Golden Corda 2	PS2	46675	35914		Keiichi Shimizu	HiHara Kazuki	Yuki Azusauma	Aoi Kaji	Akihiko Kira

Sorted display:

In the following space, capture screenshot(s) that demonstrate your program is able to rearrange the collection of data using a different sorting criterion than how the data are originally arranged in the input file.

ame	Console	Total Sales	Week 1 Sales	Character1	Character2	Character3	Character4	Character5	Character6
olden Corda 2	P52	46675	35914	Ren Tsukimori	Keiichi Shimizu	HiHara Kazuki	Yuki Azusauma	Aoi Kaii	Akihiko Kira
akuouki DS	DS	79318	14921	Toshizo Hijikata	Souji Okita	Hajime Saito	Heisu k e Toudou	Sanosuke Harada	Shinpachi Nagakura
akuouki Portable	PSP	111633	16764	Toshizo Hijikata	Souji Okita	Hajime Saito	Heisuke Toudou	Sanosuke Harada	Chikage Kazama
MGS 2nd Season	DS	163943	56202	Teru Saeki	Katsumi Shiba	Itaru Hikami	Kounoshin Hariya	Motoharu Masaki	Shota Amachi
MGS 3rd Story	DS	173849	64630	Ruka Sakurai	Kouichi Sakurai	Arashi Fujiyama	Junpei Niina	Tamao Konno	Seiji Shitara
okimeki Memorial Girl's Side	PS2	110628	34591	Hikaru Midorikawa	Sakuya Morimura	Kazuma Suzuka	Madoka Kijo	Shiki Mihara	Reiichi Himuro
ta no Prince-sama All Star	PSP	111898	67217	Kotobuki Reiji	Kurosaki Ranmaru	Mikaze Ai	Ittoki Otoya	Tsukimiya Ringo	Hyuga Ryuya
ta no Prince-sama Debut	PSP	91247	68617	Ittoki Otoya	Hijirikawa Masato	Shinomiya Natsuki	Ichinose Tokiya	Jinguji Ren	Kurusu Syo
ta no Prince-sama MUSIC2	PSP	94145	68415	Ittoki Otoya	Jinguji Ren	Kurusu Syo	Aijima Cecil	Mikaze Ai	Kotobuki Reiji
ta no Prince-sama Repeat	PSP	144555	32180	Ittoki Otoya	Hijirikawa Masato	Shinomiya Natsuki	Ichinose Tokiya	Jinguji Ren	Kurusu Syo

Analysis within a struct object:

In the following space, capture screenshot(s) that demonstrate your program is able to provide an analysis on a given struct object based on user interest.

```
Choose an option:
a. display all
b. sort
c. remove
d. analysis
e. filter by console
any other key to exit: d
This is the percentage of sales that the 1st Week Sales takes up of the total sales
                         Total Sales Week 1 Sales Wk1 % of Total Sales
Golden Corda 2
                                         35914
                           46675
                                                       76.94%
Hakuouki DS
Hakuouki Portable 111633
TMGS 2nd Season 163943
173049
                                         14921
                                                       18.81%
                                       16764
                                                      15.02%
                                        56202
                                                      34.28%
                                        64630
                                                      37.35%
Tokimeki Memorial Girl's Side 110628
                                        34591
                                                       31.27%
Uta no Prince-sama All Star 111898
                                        67217
                                                       60.07%
Uta no Prince-sama Debut 91247
                                                        75.20%
                                        68617
                                                        72.67%
                           94145
Uta no Prince-sama MUSIC2
                                        68415
Uta no Prince-sama Repeat
                           144555
                                          32180
                                                        22.26%
The most common console in the list of top-selling otomes is PSP
```

Analysis across multiple struct objects:

In the following space, capture screenshot(s) that demonstrate your program is able to provide an analysis of multiple struct objects based on user interest.

```
Choose an option:
a. display all
b. sort
c. remove
d. analysis
e. filter by console
any other key to exit: d
This is the percentage of sales that the 1st Week Sales takes up of the total sales
                                   Total Sales Week 1 Sales Wk1 % of Total Sales
     46675 35914 76.94%
Golden Corda 2
                                                  14921
16764
56202
64630
34591
67217
68617
68415
                                                                      18.81%
15.02%
34.28%
37.35%
31.27%
60.07%
75.20%

      Hakuouki DS
      79318

      Hakuouki Portable
      111633

      TMGS 2nd Season
      163943

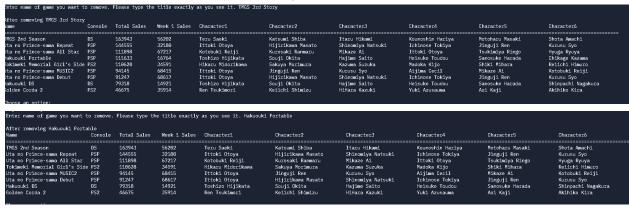
      TMGS 3rd Story
      173049

Tokimeki Memorial Girl's Side 110628
Uta no Prince-sama All Star 111898
Uta no Prince-sama Debut 91247
Uta no Prince-sama MUSIC2 94145
                                                                        72.67%
Uta no Prince-sama Repeat
                                  144555
                                                     32180
                                                                        22.26%
The most common console in the list of top-selling otomes is PSP
```

Remove an object from the original collection:

In the following space, capture screenshot(s) that demonstrate your program is able to remove an object from the original collection based on user request. It is important to perform the following test cases for this feature.

- The element to be removed is the first in the array.
- The element to be removed is somewhere in the middle of the array.
- The element to be removed is the last in the array.
- The element to be removed is not in the array.



enter name of game you want to	remove.	Please type the	title exactly	as you see it. Golden Co	rda 2				
After removing Golden Corda 2 Name	Console	Total Sales	Week 1 Sales	Characterl	Character2	Character3	Character4	Character5	Character6
MGS 2nd Season Ita no Prince-sama Repeat Ita no Prince-sama All Star Oskimeki Nemorial Girl's Side Ita no Prince-sama MUSIC2	DS PSP PSP	163943 144555 111898 119628 94145 91247 79318	56202 32180 67217 34591 68415 68617 14921	Teru Saeki Ittoki Otoya Kotobuki Reiji Hikaru Midorikawa Ittoki Otoya Ittoki Otoya Toshizo Hijikata	Katsumi Shiba Hijirikawa Masato Kurosaki Ranmaru Sakuya Morimura Jinguji Ren Hijirikawa Masato Souji Okita	Itaru Hikami Shinomdya Natsuki Mikaze Ai Kazuma Suzuka Kurusu Syo Shinomiya Natsuki Hajime Saito	Kounoshin Hariya Ichinose Tokiya Ittoki Otoya Madoka Kijo Aijima Cecil Ichinose Tokiya Heisuke Toudou	Motoharu Masaki Jinguji Ren Tsukimiya Ringo Shiki Mihara Mikaze Ai Jinguji Ren Sanosuke Harada	Shota Amachi Kurusu Syo Hyuga Ryuya Reiichi Himuro Kotobuki Reiji Kurusu Syo Shinpachi Nagakura
Enter name of game you want i Game not found. Please enter Name	correctly Console	or ensure the Total Sales	game entered i Week 1 Sales	in the list.	Character2	Character3	Character4	Character5	Character6
TMGS 3rd Story TMGS 2nd Season Uta no Prince-sama Repeat Uta no Prince-sama All Star	DS DS PSP PSP	173049 163943 144555 111898	64630 56202 32180 67217	Ruka Sakurai Teru Saeki Ittoki Otoya Kotobuki Reiji	Kouichi Sakurai Katsumi Shiba Hijirikawa Masato Kurosaki Rarmaru	Arashi Fujiyama Itaru Hikami Shinomiya Natsuki Mikaze Ai	Junpei Niina Kounoshin Hariya Ichinose Tokiya Ittoki Otova	Tamao Konno Motoharu Masaki Jinguji Ren Tsukimiya Ringo	Seiji Shitara Shota Amachi Kurusu Syo Hyuga Ryuya