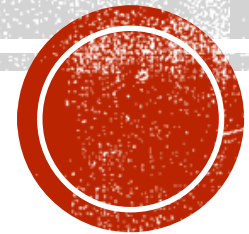


Hands-on Exercises

(Strings and Dynamic Allocation)

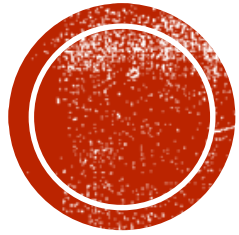
IT 1201



The problems are found inside my folder in Drive T: (teacherfiles)

Instructions:

1. In your drive, create a folder with the date today (**January 14, 2016**) as its name.
2. Place all your outputs today in the folder you just created.
3. In **teachersfiles->Polinar->IT1201**, copy the file **kpopstruct.c** and paste it in your drive.
4. Finish **kpopstruct.c** by filling in the blanks and creating the missing functions. Use the descriptions found in this file as your guide to create the missing functions.



Functions in kpopstruct.c

- Functions to be created:

1. **void insertArtist(company *c, artistType a);** - inserts an artist if and only if it is not full in the next space available in the company's artist array. The function also displays "Cannot add artist ____" once it is full.
2. **artistType getMainVocal(company c, char *group);** - Given a variable of type **company** and a **groupname**, **getMainVocal()** will return the artist record of the given group's main vocal.
3. **artistType* retrieveAllActiveLeaders(company SME, int *numLeaders);** - returns the artist record of all currently active leaders to the calling function. It would also update the **leaderCtr** variable found in main.

NOTE: The container of all the active leaders should neither be more or less than which requires you to make use of the `realloc()` function.



Functions in kpopstruct.c

- Functions to be created (cont.):

4. **int setInactiveArtists(company *c, artistType terminated[], int ctr);** - Given a **company structure variable**, a **list of artists** whose contracts have ended or terminated, and the **number of terminated artists in the list**, the function will find all the artist records in the company's artist list and sets the artists' status to inactive if the record is found. Otherwise, the function will count and display all the terminated artist records not found in the company. Finally, the function will return the number of artists whose records were successfully terminated.

NOTE:

a) the artist's ID uniquely identifies an artist



Output of kpopstruct.c

```
C:\Users\user\Google Drive\2015-2016 (2nd sem)\IT\1201 Codes\kpopStructAnswer.exe

SM Entertainment (1995)
Artist count: 10
Stage name      Group              Position           Status
-----
Jessica         Girls' Generation  Main Vocal        active
Donghae         Super Junior       Main Dancer        active
Seulgi          Red Velvet         Lead Vocal        active
Irene           Red Velvet         Leader             active
Wendy           Red Velvet         Main Vocal        active
Sulli           F(x)               Lead Dancer        active
Onew            Shinee             Leader             active
Yoona           Girls' Generation  Visual             active
Yunho           TVXQ               Leader             active
Baekhyun        EXO                Main Vocal        active

Press any key to continue . . .
```

```
C:\Users\user\Google Drive\2015-2016 (2nd sem)\IT\1201 Codes\kpopStructAnswer.exe

---List of Main Vocals in SM Entertainment---
Baekhyun        EXO                Main Vocal        active
Jessica         Girls' Generation  Main Vocal        active
Wendy           Red Velvet         Main Vocal        active

Press any key to continue . . .
```



Output of kpopstruct.c

```
C:\Users\user\Google Drive\2015-2016 (2nd sem)\IT\1201 Codes\kpopStructAnswer.exe

---List of Leaders in SM Entertainment---
Irene           Red Velvet      Leader      active
Onew            Shinee          Leader      active
Yunho           TVXQ            Leader      active

Press any key to continue . . .
```

```
C:\Users\user\Google Drive\2015-2016 (2nd sem)\IT\1201 Codes\kpopStructAnswer.exe

Seungyeon       Kara             Main Vocal   active
The record/s above are not found in the SM Entertainment artist list.
Inactive Artist count: 3
Artist count: 10
Stage name      Group            Position      Status
-----
Donghae         Super Junior     Main Dancer   active
Seulgi          Red Velvet       Lead Vocal   active
Irene           Red Velvet       Leader        active
Wendy           Red Velvet       Main Vocal   active
Onew            Shinee           Leader        active
Yoona           Girls' Generation Visual         active
Baekhyun        EXO              Main Vocal   active

Press any key to continue . . .
```

