

Assignment 3 - CT5102 Using lapply to process data

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The First step is to include the library repurrrsive, which should be installed from CRAN.

```
library(repurrrsive)
#View(sw_films)
```

Next, write a function that returns the list of movie directors.

```
get_directors <- function(){
  unique(unlist(lapply(sw_films, function(x)x$director)))
}
dirs <- get_directors()
dirs
```

```
## [1] "George Lucas"      "Richard Marquand" "Irvin Kershner"   "J. J. Abrams"
```

Next, write a function that returns the folloiwng information for a specific set of movies (or movie) associated with a director.

```
get_film_info <- function(director){
  target <- lapply(sw_films, function(x)
    if(x$director==director)
      list(Director=x$director, Title=x$title, Episode=x$episode_id,
           Opening=x$opening_crawl, Date=x$release_date)
    else NA)
  target <- target[!is.na(target)]
  target
}
movies <- get_film_info("George Lucas")
str(movies)
```

```
## List of 4
## $ :List of 5
## ..$ Director: chr "George Lucas"
## ..$ Title   : chr "A New Hope"
## ..$ Episode : int 4
## ..$ Opening : chr "It is a period of civil war.\r\nRebel spaceships, striking\r\nfrom a hidden base
## ..$ Date    : chr "1977-05-25"
## $ :List of 5
## ..$ Director: chr "George Lucas"
## ..$ Title   : chr "Attack of the Clones"
## ..$ Episode : int 2
## ..$ Opening : chr "There is unrest in the Galactic\r\nSenate. Several thousand solar\r\nsystems ha
## ..$ Date    : chr "2002-05-16"
## $ :List of 5
```

```

## ..$ Director: chr "George Lucas"
## ..$ Title   : chr "The Phantom Menace"
## ..$ Episode : int 1
## ..$ Opening : chr "Turmoil has engulfed the\r\nGalactic Republic. The taxation\r\nof trade routes
## ..$ Date    : chr "1999-05-19"
## $ :List of 5
## ..$ Director: chr "George Lucas"
## ..$ Title   : chr "Revenge of the Sith"
## ..$ Episode : int 3
## ..$ Opening : chr "War! The Republic is crumbling\r\nunder attacks by the ruthless\r\nSith Lord, C
## ..$ Date    : chr "2005-05-19"

```