

# CS 221 C and System Programming

## Assignment 8

**Due date: November 23, 2015**

Submit your `zip` file to Canvas before 11:59 p.m. on the due date.

Use the data given in the files `G.txt`, `PG.txt`, `PG-13.txt`, `R.txt`, `alltime.txt` for the set of top-grossing films in each rating category (`G`, `PG`, `PG-13`, `R` and `alltime.txt`), answer the following questions.

### 1 Top-Ranked All-Time Film (20 marks)

- a. Based on `alltime.txt`, what is the top-grossing film of all time?
- b. Give the **shell** (or **sed**, **awk**) command (or commands) you used to find the answer to this question.

### 2 50th-Ranked R Film (20 marks)

- a. Based on `R.txt`, what is the 50th ranked R film by gross on the list?
- b. Give the **shell** (or **sed**, **awk**) command (or commands) you used to find the answer to this question.

### 3 Blockbusters in the 70s or 80s (20 marks)

- a. Based on the `alltime.txt`, would you have preferred to make money off of blockbusters in the 70s or in the 80s?
- b. Give the **shell** (or **sed**, **awk**) command (or commands) you used to find the answer to this question.

### 4 Blockbusters in the 60s (20 marks)

- a. Based on the `alltime.txt`, which studio made the most money off of blockbusters in the 60s?
- b. Give the **shell** (or **sed**, **awk**) command (or commands) you used to find the answer to this question.

## 5 Film Category Selection (20 marks)

- a. Suppose you had a chance to make 1 film with a top director and the director was so good you were guaranteed that whatever film you made would be in the top 5 grossing films in its ratings category (G, PG, PG-13, R) — and equally likely to be ranked 1, 2, 3, 4, or 5. What rating (G, PG, PG-13, R) would you choose to give your film if you wanted to make the most money?
- b. Give the **shell** (or **sed**, **awk**) command (or commands) you used to find the answer to this question.

## Submission Information

Type your programs to a file names `ass8.sh` and run your program to generate `typescript` file. Zip `ass8.sh` and `typescript` to `ass8.zip`. Submit `ass8.zip` to Canvas.