**CS 145 ME 1-3**

**Deadline: Monday, 01/29/18 11:59pm via email**

Note: Lines in italics are user input lines

**ME1.java: Rock-Paper-Scissors**

Rock beats Scissors, Paper beats Rock, Scissors beats Paper

**Sample Dialogs:**

*player 1: scissors*

*player 2: rock*

player 2 wins

**ME2.java: Horoscope**

Given the month and the day of the user's birthday, print out his or her zodiac sign. Zodiac signs are as follows:

* Aries - Mar 21 to Apr 19
* Taurus - Apr 20 to May 20
* Gemini - May 21 to Jun 20
* Cancer - Jun 21 to Jul 22
* Leo - Jul 23 to Aug 22
* Virgo - Aug 23 to Sept 22
* Libra - Sept 23 to Oct 22
* Scorpio - Oct 23 to Nov 21
* Sagittarius - Nov 22 to Dec 21
* Capricorn - Dec 22 to Jan 19
* Aquarius - Jan 20 to Feb 18
* Pisces - Feb 19 to Mar 20

Sample Dialog

*Enter month: Sept*

*Enter day: 21*

Virgo

**ME3: Zombie!**

There is a zombie in the room, with 100 hit points. Write a program with a menu that does the indicated action to the zombie.

A. Shoot the zombie – this decreases the zombie's hp by 10

B. Grenade the zombie – this decreases the zombie's hp by 30. However, there is a 20% chance this will miss.

C. Decapitate (AARGH) – this instantly reduces the zombie's hp to 0. However, since you have to get into melee range, there's a 50% chance that this will turn you into a zombie!

The action will be performed once you choose the action. Print out the action of the outcome (if you hit/miss) and then the current zombie hp. After this, the zombie will generate d20 hitpoints (random 1-20), print the outcome of the healing action. Finally, show the menu again.

Sample dialog:

The zombie has 100 hp. What will you do?

A. Shoot it

B. Grenade it

C. Decapitate it

*Enter choice: B*

You toss a grenade. It hits! It has 70 hp left.

Oh no! It begins to regenerate. It has 82 hp now.

The zombie has 82 hp. What will you do?

A. Shoot it

B. Grenade it

C. Decapitate it

*Enter choice:*

...

Loop until the zombie's hp is brought below zero (or you get turned into a zombie!). Immediately end the program once this happens (zombie does not regenerate after it is killed). Feel free to write your own text for this machine exercise, just make sure to show all the necessary information and choices. A 20% chance to miss means that you generate a random number between 1 to 100. If it is between 1-20, then you miss. A 50% chance to become a zombie means you generate a random number between 1 to 100. If it is between 1-50, then you get turned into a zombie.

**Submission guidelines**

Filenames are CS145ME1.java, CS145ME2.java and CS145ME3.java. Please submit these files as attachments to the following email address. Please also use the following email subject as shown by the sample below.

**Email:** [**mtcarreon@dcs.upd.edu.ph**](mailto:mtcarreon@dcs.upd.edu.ph)

**Subject: CS 145 ME 1-3 – Carreon, Mario** *(sample only, change this to your name)*

Deadline of this ME is on Mon, 01/29/18, 11:59pm. Only completely working solutions will be accepted. You are only allowed to submit once. Source code not following the **specified filename format or email subject** will also not be accepted. No late submissions will be accepted.

If you have any questions, please write an email to the address written below as I check this other email address more often. Please do not use our googlegroups to send questions.

**Email:** [**mario.carreon@gmail.com**](mailto:mario.carreon@gmail.com)

**Subject: CS 145 ME 1-3 Question**