ECS 315: In-Class Exercise # 1 - Sol

Instructions

1. Separate into groups of no more than three students each.
2. **Explanation is not required for this exercise.**
3. **Do not panic.**

Date: 2 0 / 0 8 / 2019

Name		ID (last 3 digits)		
Prapun		5	5	5

1. (6 pt) A student played the Monty Hall game six times. Each time, he always chose to switch his choice at the last step. The results were recorded below with W for winning (getting a car) and L for losing (getting a goat).

   L W L W L L.

   Let A be the event that he won.

   Let $R(A,n)$ denote the **relative frequency** of event A for the first n plays.

   Calculate $R(A,n)$ from $n = 1$ to $n = 6$. Write your answers in the form X.XX.

> Recall that, to find the relative frequency of an event A for the first n trials, we use the formula:
>
> $$R(A,n) = \frac{N(A,n)}{n} = \frac{\#\text{trials that } A \text{ occurs}}{n}$$

n	1	2	3	4	5	6
$R(A,n)$	$\frac{0}{1} = 0.00$	$\frac{1}{2} = 0.50$	$\frac{1}{3} \approx 0.33$	$\frac{2}{4} = 0.50$	$\frac{2}{5} = 0.40$	$\frac{2}{6} \approx 0.33$

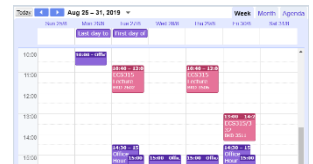Note how the denominator is increased as we increase the value of n.

2. (3 pt) List **all** of Dr.Prapun's office hours during <u>next week</u>.
   Hint: Check Google Calendar on the course website.
   Note that there are two types of office hours: normal and document signing. Put both types in the table below. If there are overlapping office-hour slots, "union" their time intervals first before putting the result in the table below.

Many students are uncertain or shy about utilizing a professor's office hours. Don't let that be you! Each professor should hold office hours, a designated time in which the professor is available in his or her office to speak individually with students.

Date	Time	
	From	To
August 26, 2019	10:00	10:40
August 27, 2019	14:30	15:30
August 28, 2019	15:00	15:30
August 29, 2019	15:00	15:30
August 30, 2019	14:30	15:30

3. (1 pt) (This one final task has to be worked on <u>individually</u>, not as a group.)
   Use your own Line account to send

   > your student id, followed by your full name, and then your nickname inside the parentheses

   into the **ECS315 Line group**.

   Example: "50764555 Nadech Kugimiya (Barry)"

   Remark: If you don't have a Line account, email the message as instructed above to prapun@siit.tu.ac.th.