Week 1 Workshop: Introduction to Data Analytics and R

Activity 1. Introduction to R

Referring to Workshop 1 Activity 1 on the Ed platform (www.edstem.org), you are expected to perform basic calculations using R coding.

Activity 2. Introduction to R (Happy Cow Case)

To continue your introduction to R, we will be using the file *staff_weekly.csv* to look at ice cream sales.

(a) Import, inspect, and extract data in R:
- (i) Investigate the type of data,
- (ii) View the data,
- (iii) Determine the number of rows and columns (dimensions)
- (iv) Extract row 1 and column 3
- (v) Extract the entire row 1,

(b) You can see from the table below that the columns related to ice cream sales don't start until the 3rd column i.e. *S.Caramel:*

	week	Month	S.Caramel	Mango	...	Pistachio	Ginger
1	1	April	150.0000	240.0000	...	0	0
2	2	April	180.0000	180.0000	...	0	0
3	3	April	90.0000	300.0000	...	0	0
...					...		...
25	25	September	480.0000	120.0000	...	0	0
26	26	September	240.0000	120.0000	...	0	0

Please complete the following tasks:

i. Use R to read in the dataset “staff_weekly.csv”. How many rows and columns of data are there in the dataset?

```
staff <- read.csv("staff_weekly.csv"
ncol(staff)
nrow(staff)
```

ii. Display the first 5 columns and rows 1, 10, and 20 of the datasets.

```
staff [c(1,10,20), 0:5]
```

iii. Extract out only the rows and columns that contain data on ice cream sales. You will needto extract all the rows and columns from column 3 onwards.

```
staff [,3: ncol (staff)]
```

iv. Extract the column for the flavour Mango.

```
subset ( staff, select= “Mango”
```

v. Discuss in your group why it is important to be able to isolate specific columns or rows of data.