

This project is about the Data of internet usage [in kb] by graduate student at an indian university Answer for the following questions using Data Analysis What is the most frequent internet activity time of the day ? How often the ip changes? How often the device changed. What is the average usage per hour, per day and per month ?

Dataset:

Student ID	Date	Time	Activity	Usage (kb)	IP Address	Device
1	01/01/2021	9:00 AM	Browsing	500	192.168.1.1	Laptop
1	01/01/2021	9:30 AM	Video Streaming	1500	192.168.1.1	Laptop
1	01/01/2021	10:00 AM	Gaming	3000	192.168.1.2	Laptop
1	01/01/2021	11:00 AM	Browsing	500	192.168.1.1	Laptop
2	01/01/2021	12:00 PM	Video Streaming	1500	192.168.1.2	Mobile
2	01/02/2021	1:00 PM	Gaming	2500	192.168.1.3	Mobile

Student ID	Date	Time	Activity	Usage (kb)	IP Address	Device
2	01/02/2021	2:00 PM	Browsing	800	192.168.1.3	Mobile
2	01/03/2021	3:00 PM	Video Streaming	1500	192.168.1.2	Mobile
2	01/03/2021	4:00 PM	Gaming	3000	192.168.1.3	Mobile
3	01/03/2021	5:00 PM	Browsing	600	192.168.1.4	Laptop

#### Data Analysis:

1. Most frequent internet activity time of the day: The data shows that most frequent internet activity time of the day is between 1:00 PM to 5:00 PM with 4 out of 9 records.
2. How often the IP changes: The data shows that the IP changes 2 times in a day for student 1, 3 times in a day for student 2 and once for student 3.
3. How often the device changed: The data shows that the device changed 1 time in a day for student 1, 2 times in a day for student 2 and once for student 3.
4. Average usage per hour, per day and per month:
  - Average usage per hour:  $(500 + 1500 + 3000 + 500 + 1500 + 2500 + 800 + 1500 + 3000 + 600) / 9 = 1500$  kb
  - Average usage per day:  $(1500 + 1500 + 2500 + 800 + 1500 + 3000 + 600) / 7 = 1700$  kb
  - Average usage per month:  $(1700 * 31) / 1024 = 52.67$  MB