## Artificial Intelligence

## and

## Machine Learning

Project Report

Semester-IV (Batch-2022)

CASE STUDY: Project on dataset amazon

**Url-** [https://drive.google.com/file/d/1XMwh7oSImI8-kcMneKJ0mPSmf2XYNIQw/view?usp=sharing](https://drive.google.com/file/d/1XMwh7oSImI8-kcMneKJ0mPSmf2XYNIQw/view?usp=sharing" \t "https://www.smartwebsolutions.org/text-to-url/_blank)

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Description automatically generated with low confidence

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**Description about case study:**

# Display Top 10 rows

# 2. Display Last 10 rows

# 3. Check datatype of Each column

# 4. Check null values in the DataSet

# 5. How many rows and columns in our dataset

# 6. Highest and lowest purchase price in dataset

# 7. Average purchase price

# 8. How many people have French 'fr' as their Language

# 9. Job title contains engineer

# 10. find email of the person with the following IP address: 132.207.160.22

# 11. How many people have Mastercard as their Credit Card Provider and Made A purchase above 50?

# 12. Find Email of the person with the following Credit Card number:4105595335494659

# 13. how Many people Purchase During The Am and How Many People purchase During Pm?

# 14. How Many People Have A credit Card That Expires In 2020

# 15. Top 5 Most Popular EMail providers(eg Gmail.com, Yahoo.com,etc.)

**Methods and libraries used:**

Numpy,pandas:

1. Head: The "head" method in Pandas is used to display the first few rows of a DataFrame or Series.
2. Tail: The “Tail” method returns a specified number of last rows.
3. Dtypes: This returns a series with the data type of each column
4. Isnull: Detect missing values for an array-like object.
5. Shape: used to obtain the shape of a given array.
6. Min: The min() method returns a Series with the minimum value of each column.
7. Max: The max() method searches column-wise and returns the minimum value for each row.
8. Mean: It is computed by adding up all the values in the series and then dividing by the total number of values
9. Len:Compute the length of each element in the Series/Index.
10. Isin: checks if the Dataframe contains the specified value(s).
11. Info: Provides basic information about the data frame, such as column types and missing values.