**COMPUTATIONAL METHODS AND DATA ANALYSIS - CODE: BIT3135**

**GROUP PRESENTATION**

**GROUP MEMBERS**

|  |  |  |
| --- | --- | --- |
| **S/No.** | **NAME** | **REG. No.** |
| **01** | ALAN GITONGA | BSCAS/2019/86904 |
| **02** | PASCAL NJERU | BSCAS/2019/88544 |
| **03** | CONSLATA ODUOR | BSCAS/2019/87690 |
| **04** | DOROTHY AWINO | BSCAS/2019/87987 |
| **05** | GOLICHA GUYO | BSCAS/2019/87349 |
| **06** | JOHN MWASHA | BSCAS/2019/88547 |

**RESULT OF RUNNING THE DATA ANALYSIS CODE USING PANDAS**

**import** numpy **as** np

**import** pandas **as** pd

df **=** pd.read\_csv("C:/Users/ALIGO-TLC/Desktop/Data Analysis/DirectMarketing.csv")

print(df.shape)

df.head()

(1000, 10)

Out[3]:

|  | **Age** | **Gender** | **OwnHome** | **Married** | **Location** | **Salary** | **Children** | **History** | **Catalogs** | **AmountSpent** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **0** | Old | Female | Own | Single | Far | 47500 | 0 | High | 6 | 755 |
| **1** | Middle | Male | Rent | Single | Close | 63600 | 0 | High | 6 | 1318 |
| **2** | Young | Female | Rent | Single | Close | 13500 | 0 | Low | 18 | 296 |
| **3** | Middle | Male | Own | Married | Close | 85600 | 1 | High | 18 | 2436 |
| **4** | Middle | Female | Own | Single | Close | 68400 | 0 | High | 12 | 1304 |

In [4]

**CHECK MISSING VALUES**

df.isna().sum()

Out[4]:

Age 0

Gender 0

OwnHome 0

Married 0

Location 0

Salary 0

Children 0

History 303

Catalogs 0

AmountSpent 0

dtype: int64

In [5]:

df.History.fillna("Nothing", inplace**=True**)

df.isna().sum().sum()

Out[5]:

0

In [6]:

PRINT AVERAGE AND MEAN CASH SPENT

print(f'The average money spent is {df.AmountSpent.mean()}. The median is {df.AmountSpent.median()}')

The average money spent is 1216.77. The median is 962.0

In [7]:

**DISPLAY AVEGRAGE EXPENSES ON HISTOGRAM**

df['AmountSpent'].plot(kind**=**'hist', figsize**=**(10,6))

Out[7]:

<AxesSubplot:ylabel='Frequency'>

