DATA BOOTCAMP FINAL PROJECT PRESENTATION EXCEL, POWER BI & MYSQL

BY SAMANTHA BROWN

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OBJECTIVE

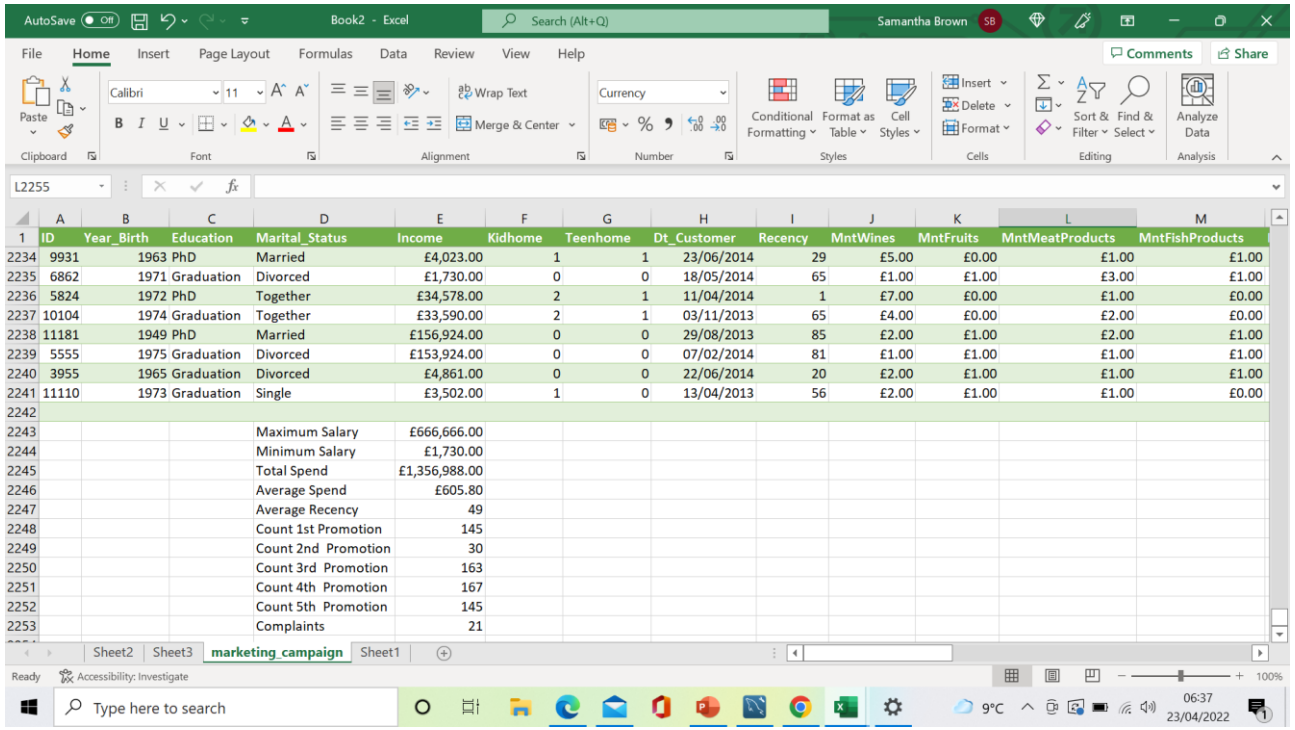
Learn how to become a data analyst

Understanding how to use analytical programs

Increase my knowledge

Upskill myself

EXCEL



	ID	Year_Birth	Education	Marital_Status	Income	Kidhome	Teenhome	Dt_Customer	Recency	MntWines	MntFruits	MntMeatProducts	MntFishProducts
2234	9931	1963	PhD	Married	£4,023.00	1	1	23/06/2014	29	£5.00	£0.00	£1.00	£1.00
2235	6862	1971	Graduation	Divorced	£1,730.00	0	0	18/05/2014	65	£1.00	£1.00	£3.00	£1.00
2236	5824	1972	PhD	Together	£34,578.00	2	1	11/04/2014	1	£7.00	£0.00	£1.00	£0.00
2237	10104	1974	Graduation	Together	£33,590.00	2	1	03/11/2013	65	£4.00	£0.00	£2.00	£0.00
2238	11181	1949	PhD	Married	£156,924.00	0	0	29/08/2013	85	£2.00	£1.00	£2.00	£1.00
2239	5555	1975	Graduation	Divorced	£153,924.00	0	0	07/02/2014	81	£1.00	£1.00	£1.00	£1.00
2240	3955	1965	Graduation	Divorced	£4,861.00	0	0	22/06/2014	20	£2.00	£1.00	£1.00	£1.00
2241	11110	1973	Graduation	Single	£3,502.00	1	0	13/04/2013	56	£2.00	£1.00	£1.00	£0.00
2242													
2243				Maximum Salary	£666,666.00								
2244				Minimum Salary	£1,730.00								
2245				Total Spend	£1,356,988.00								
2246				Average Spend	£605.80								
2247				Average Recency	49								
2248				Count 1st Promotion	145								
2249				Count 2nd Promotion	30								
2250				Count 3rd Promotion	163								
2251				Count 4th Promotion	167								
2252				Count 5th Promotion	145								
2253				Complaints	21								

The Formulas used

=MAX(marketing_campaign[Income])

=MIN(marketing_campaign[Income])

=SUM(P2:P2241)

=AVERAGE(P2:P2241)

=AVERAGE(marketing_campaign[Recency])

=COUNTIF(marketing_campaign[Accepted Cmp1],Y2242) (*Used for all promotion type and complaints*)

EXCEL- PIVOT TABLES (GROUPING AND SORTING)

Count of Total Sales	
Total Sales	Total
<0 or (blank)	
0-499	1245
500-999	393
1000-1499	356
1500-1999	196
2000-2499	47
2500-2999	3
Grand Total	**2240**

This has grouped the sales by count, created a range function and then sorted from largest to smallest.

Count of Total Sales	
Income	Total
<0 or (blank)	24
0-24999	242
25000-49999	818
50000-74999	797
75000-99999	346
100000-124999	5
150000-174999	7
650000-674999	1
Grand Total	**2240**

This has been grouped by income, the income range was created to show the count of sales within each salary range.

Sum of Total Sales	
Education	Total
Graduation	£698,626.00
PhD	£326,791.00
Master	£226,359.00
2n Cycle	£100,795.00
Basic	£4,417.00
(blank)	
Grand Total	**1356988**

This has been grouped by education, Sum of sales, then sorted from largest to smallest.

SQL-DATA ANALYTICS

```
 9
10      -- 2.
11      -- Total Average of website visits
12  •   SELECT AVG(NumWebVisitsMonth) AS 'Average web visits' from sql_hr.marketing_campaign;
13
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Average web visits
5.3165

```
14      -- 3.
15      -- I want to find the marital status of the customer base
16      -- I have identified the marital statuses that are available
17  •   SELECT * FROM sql_hr.marketing_campaign
18      GROUP BY Marital_Status;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ID	Year_Birth	Education	Marital_Status	Income	Kidhome	Teenhome	Dt_Customer	Recency	MntWines	MntFruits
5524	1957	Graduation	Single	58138	0	0	04-09-2012	58	635	88
4141	1965	Graduation	Together	71613	0	0	21-08-2013	26	426	49
5324	1981	PhD	Married	58293	1	0	19-01-2014	94	173	43
965	1971	Graduation	Divorced	55635	0	1	13-11-2012	34	235	65

SQL-DATA ANALYTICS

```
21
22    -- Which customers are single
23 •  SELECT * FROM sql_hr.marketing_campaign
24    WHERE Marital_Status LIKE '%Single%';
25
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

ID	Year_Birth	Education	Marital_Status	Income	Kidhome	Teenhome	Dt_Customer	Recency	MntWines	MntFruits	MntMeatProducts	MntFishProducts	MntS
5524	1957	Graduation	Single	58138	0	0	04-09-2012	58	635	88	546	172	88
2174	1954	Graduation	Single	46344	1	1	08-03-2014	38	11	1	6	2	1
2114	1946	PhD	Single	82800	0	0	24-11-2012	23	1006	22	115	59	68
2278	1985	2n Cycle	Single	33812	1	0	03-11-2012	86	4	17	19	30	24
7892	1969	Graduation	Single	18589	0	0	02-01-2013	89	6	4	25	15	12
5255	1986	Graduation	Single	0	1	0	20-02-2013	19	5	1	3	3	263
10738	1951	Master	Single	49389	1	1	29-08-2013	55	40	0	19	2	1
7281	1959	PhD	Single	0	0	0	05-11-2013	80	81	11	50	3	2

```
54    -- Calculating the age of customers and arranging them in descending order
55    -- This would then allow me to identify the lowest aged customer and the highest
56 •  SELECT ID,
57    year (curdate())-Year_Birth
58    from sql_hr.marketing_campaign
59    ORDER BY Year_Birth DESC;
60
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

ID	year (curdate())-Year_Birth
9909	26
193	26
4427	27
8315	27
5184	27
10548	27
3661	27

SQL-DATA ANALYTICS

```sql
-- Calculating the age of customers and arranging them in descending order
-- This would then allow me to identify the lowest aged customer and the highest
SELECT ID,
year (curdate())-Year_Birth
from sql_hr.marketing_campaign
ORDER BY Year_Birth DESC;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

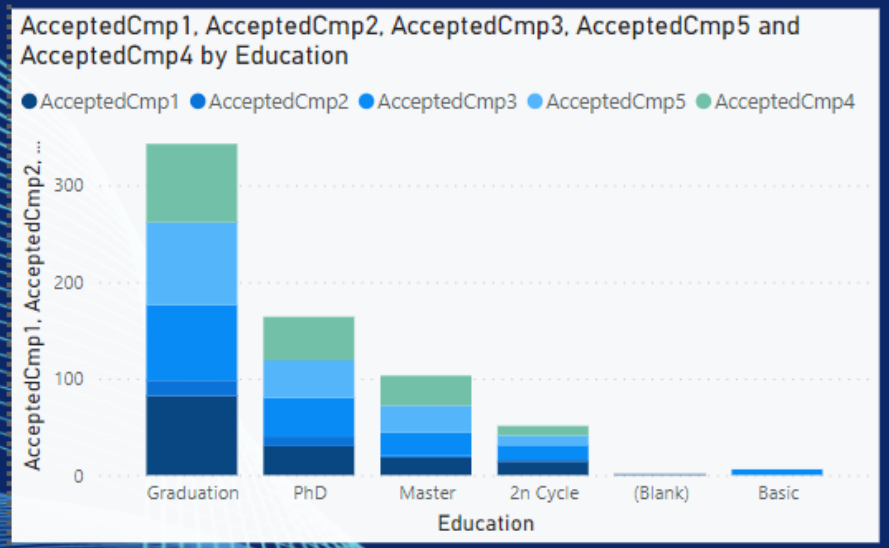
ID	year (curdate())-Year_Birth
9909	26
193	26
4427	27
8315	27
5184	27
10548	27
3661	27

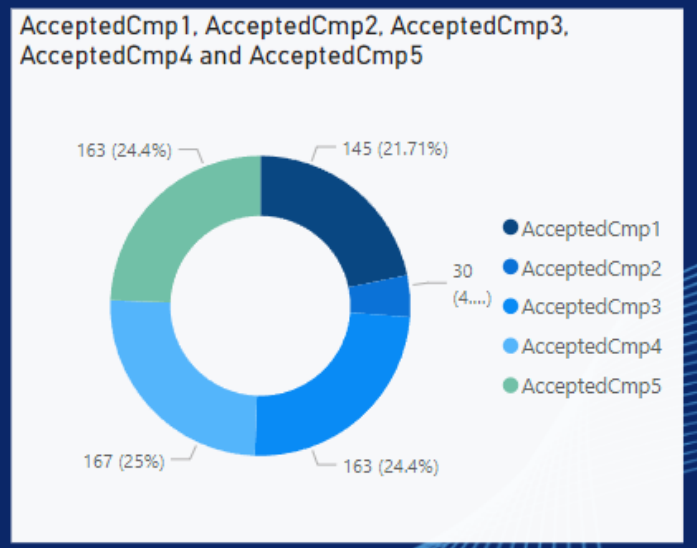
```sql
-- Group by age range using new field created

SELECT  SUM(CASE WHEN year (curdate())-Year_Birth BETWEEN 26 AND 50 THEN 1 ELSE 0 END) AS '26-50',
        SUM(CASE WHEN year (curdate())-Year_Birth BETWEEN 51 AND 75 THEN 1 ELSE 0 END) AS '51-75',
        SUM(CASE WHEN year (curdate())-Year_Birth BETWEEN 76 AND 129 THEN 1 ELSE 0 END) AS '76-12'
FROM sql_hr.marketing_campaign
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	26-50	51-75	76-12
▶	1000	1197	43

POWER -BI





Marital_Status	Kidhome	Teenhome
Married	394	442
Together	261	307
Single	223	195
Divorced	96	137
Widow	18	49
Alone	3	2
Absurd	0	0
YOLO	0	2
Total	**995**	**1134**