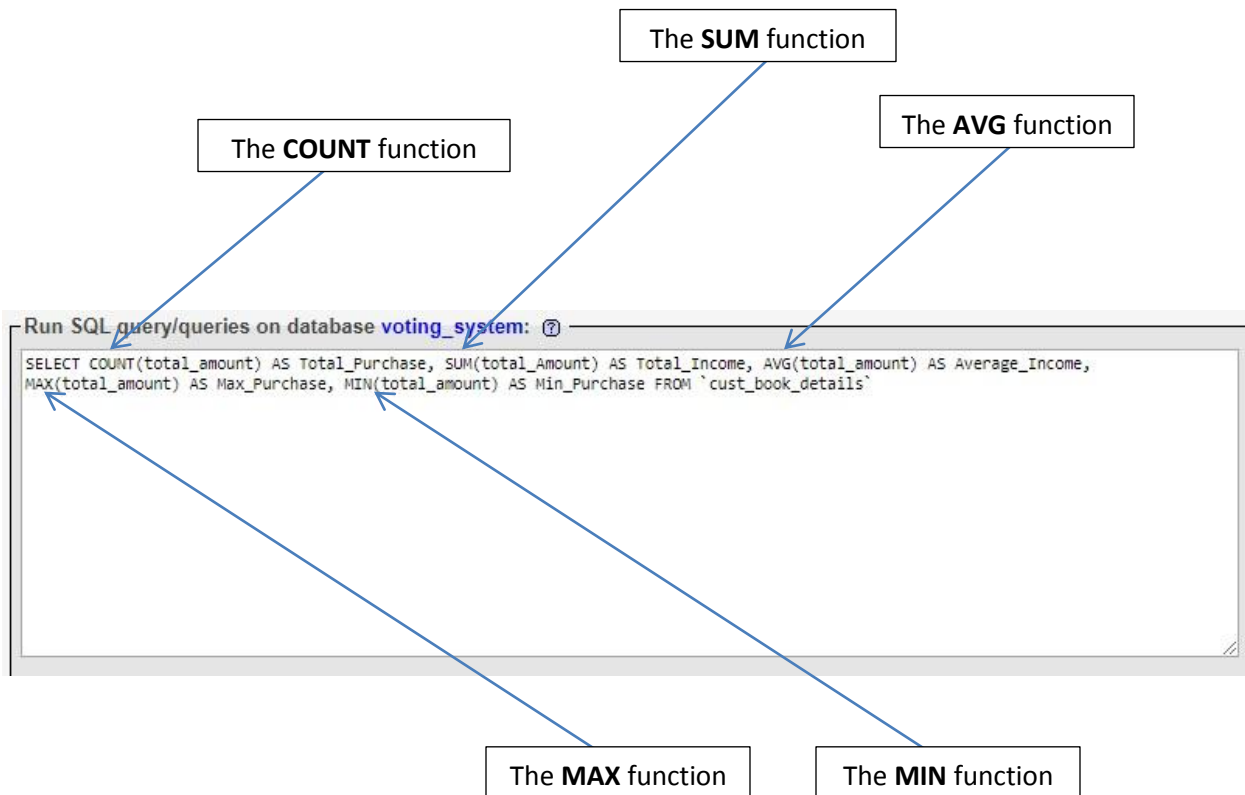**MySQL functions**

Mathematical calculations have become a part of our lives. For instance, calculating the total profits earned by your company in the last financial year or calculating the investments to be done by you to save your tax or calculating average marks of a particular class and so on.

In order to solve problems such as these, functions came into existence. By using the functions available in MySQL, we can manipulate data and return results in a speedy and efficient way.

For example to compute the total amount of sale in one year, the *SUM* function can be used to do the calculations easily, therefore, save time.

The table below shows some examples of MySQL functions.

Function	Definition
AVG	Returns the average value from the group of values.
COUNT	Returns the total number of items in a group of items in the *int* data type value.
MAX	Returns the maximum value from the group of values.
MIN	Returns the minimum value from the group of values.
SUM	Returns the total of the specified column or total of the group of values.

The **SUM** function

The **AVG** function

The **COUNT** function

Run SQL query/queries on database **voting_system**: ⓘ

```
SELECT COUNT(total_amount) AS Total_Purchase, SUM(total_Amount) AS Total_Income, AVG(total_amount) AS Average_Income,
MAX(total_amount) AS Max_Purchase, MIN(total_amount) AS Min_Purchase FROM `cust_book_details`
```

The **MAX** function

The **MIN** function

Total_Purchase	Total_Income	Average_Income	Max_Purchase	Min_Purchase
11	89537.13333333311	8139.739393939374	909.25000000001	1091.1