**SQL Practice questions**

Orders table description:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| date | amount | **order\_id** | order\_type | seller\_id | buyer\_id | is\_FTB | is\_FTS | FTB\_created\_at | gig\_id | platform | category\_id | SC\_id | is\_tip |

* **date [timestamp]:** The date when the order was **created**
* **amount [float]:** the amount of the order
* **order\_id [integer]:** the order\_id [This is the key of this table]
* **order\_type [string]:** we have two types of orders:
  + ‘gig’ - regular order from purchasing the gig as is
  + ‘custom\_offer’ - order that was customized specifically to the buyer
* **seller\_id [integer]:** the unique id of the seller
* **buyer\_id [integer]:** the unique id of the buyer
* **is\_FTB [integer]:** FTB meaning is a First Time Buyer. If 1 then the order is the first order ever for the buyer. 0 otherwise
* **is\_FTS [integer]:** FTS meaning is a First Time Seller. If 1 then the order is the first order ever for the seller. 0 otherwise.
* **FTB\_createt\_at [timestamp]:** The timestamp of the buyer’s first order ever
* **gig\_id [integer]:** The gigs that was purchase in the order
* **platform [string]:** The platform (web, mobile\_web, app) where the order was made
* **category\_id [integer]:** the category identifier `
* **SC\_id [integer]:** The Sub Category identifier. Each category have several sub categories under it
* **Is\_tip [integer]:** a tip given to the seller by the buyer is also registered` in the database as an order. This field indicating if the order was a tip

Users registration table description:

|  |  |  |
| --- | --- | --- |
| **User\_id** | registration\_created\_at | country |

* **User\_id [integer]:** The user\_id [This is the key of this table]
* **registration created\_at [timestamp]:** The registration timestamp
* **country [string]:** The country of the user

**Questions:**

\*please exclude tips unless specify otherwise

1. What are the top 10 sub categories by revenue?
2. What are the top 5 sub categories by SPB and OPB (SPB=spend per buyer, OPB= orders per buyer)
3. What is our avg daily revenue and avg number of orders?
4. How much daily revenue & orders we get from first time buyers*?*
5. What are the top 3 countries that our buyers are coming from?
6. What is the difference in average sale price for first\_time\_buyers vs. Repeat buyer(not first time buyers)? - please provide just the diff *[(ftb revenue / not\_ftb revenue) -1]*
7. What are the top 5 sellers’ countries with the highest gap in spend per buyer (revenue / buyers) between FTB and Repeat buyers?
8. What are the top 5 categories with the higher % of tip?
9. How does the daily revenue & orders distribute between the platforms? (please provide your answer in %)
10. What are the top 5 categories with the higher absolut diff (Subtraction) between the average of unique SC per buyer and median of unique SC per buyer
11. Out of the revenue of 2021 what is the distribution of revenue by buyer cohorts (by “age”/ “seniority”)? show the distribution by the year of the FTB order. Results should look something like this:

|  |  |
| --- | --- |
| *FTB year* | *% revenue* |
| *2021* | *0.6* |
| *2020* | *0.3* |
| *2019* | *0.1* |

***Bonus questions:***

1. Show a daily trend line from 2021 that shows the 7 days SPB (Spend per Buyer) *.*

*Each day should show the SPB for the following 7 days. E.g - The value on Jan 1st should the SPB 1st till Jan 7th)*

1. For FTBs only - what is the 7 days retention rate for Sep 2021 by order type.