Part two Car prediction's docstring file

Prerequisites:

- These factors will directly impact the summarized price value of the car
- Some of the factors are having a vague idea thus no exact maths are implied, Thus, these factors are coded such that an *impact factor* can be passed as input so as to fluctuate the price as per the **impact factor value.** These numbers can be considered as analogy to the actual instance when the condition/factor will be backed by the robust logic/math then how these factor will influence the price

- **Impact Factor Value** usually ranges from -2 to +2 as an integer
and impacts the summarized price for respective "factor into consideration"

1) seller_urgency

Explanation: It denotes the Seller's urgency of selling. Enabling this feature means that the seller is in dire urgency to sell his car so we assure him with the lowest price that we commit to selling the car for, within the next 45 days

Dependencies: Standard deviation

Impact: Subtracting *15% flat on both price(lower and higher)*

2) inventory_level

Explanation: It denotes the Inventory level i.e. Sales of any car will be impacted by the no. of already available-ility of those cars in our marketplace i.e. Tbl_Service_Request. It will decrease the chances of selling as stacking increase, so the price has to be low for registering the newer car for sale

Dependencies: TSR - transaction_type = seller's counts

Impact : Subtracting [0-10%,] on both price

3) time_decay

Explanation: It is Age of inventory or time decay. Once a newly registered car then days passed till current date will impact the value of

Dependencies: TSR Table se added_on & expiry_date

Impact **:** Subtracting[0-10%,] on BuyerAsked only

4) competition_listings

Explanation: It is Competition listings will be FILTER with ZIP for both selling and buying. The number of already available cars in a competitive marketplace for sale will decrease the chances of selling, so the price has to be low for registering newer

Dependencies: Counts for each website but for now [0,1] via tbl_all_car

Impact: +-[0-10%,] on both this includes a factor for elite cars as less compete for hence more value/price

5) historical_sales

Explanation: Past sales data will give us confidence in more of the similar transaction thus it will impact all 4 values accordingly

Dependencies: Last transaction & current date is the dividing factor. Least price sold & highest price bought considered via Closed deals API

Impact : ADDING [0-5-10%] on both

6) market_data is Market data API: Integration is done via **VINaudit API** impacting Buyer price by shaking hands in mid-range. Currently Nothing is done

7) product_features is Product features like AutoDriving, parking, GPS feature etc. More to discuss.. Currently Impact factor is passed as input from -2 to +2

8) offer_statistics

Explanation :It is Buyer's/Bidders response (offers)Offered received for a car within a divided by timeframe, demand density, will increase both

Dependencies: demand density, offered prices via All offers API

Impact : ADDING [0-10%] on both

9) user_analytics

It is User's analytics & interests measure Google analytics values like bounce rate,time spent, clicked through. Currently inactive

10)third_party is Actual sales Data API to be purchased

Explanation : How third party are selling

Currently Impact factor is passed as input from -2 to +2

11)overall_condition Condition (New vs Accidental) Specialization &

Currently Impact factor is passed as input from -2 to +2 how severe car is.

How input (impact factors) are passed:

- Either you can pass **True or False** with respective name column to trigger the factor
- Or you can pass **integers (with sign)** to consider the impact intensity from -2 to +2. For example passing “2” will make sure maximum intensity of the impact is considered in summarized price
- NO value passed will be considered as the factor not taken into consideration