

# Problem Statement

ADX is an ad exchange platform for large publishers with significant sales. It supports both Web and mobile apps & game inventories. Through ADX, publishers can sell their ad inventory to advertisers and agencies using real-time bidding technology. AdX provides more efficient usage of ad spaces using real-time auctions.

Data Definition:

## Sample\_ADX\_data

Column Name	Type	Comments
date	DATE	Date on which the report log was recorded
pub_id	STRING	Unique ID of a Publisher. Publisher is the one who owns a particular app and wants to monetize by offering ad-space on his/her app
app_id	STRING	Unique ID of the app
ad_unit_code	STRING	Unique ID of an ad_placement_unit space given for a particular app. Can be more than 1 unit code for a single app
country	STRING	Country from which the ad requests came
requests	INTEGER	The number of time an ad was requested by the app
responses	INTEGER	The number of times has the network responded with an Ad for a particular ad_request
impressions	INTEGER	When an ad has been served to the mobile device, it needs to be shown on the screen. Once the ad is displayed it is counted as an impression
clicks	INTEGER	Clicks coming after the ad is being rendered on the screen
revenue	NUMERIC	Total revenue made by the app in USD

A sample dataset with data for a few apps which uses ADX is given from the month of October.

**You need to find out if there is any anomaly present in the data for any of the apps present in the sample dataset.** The metrics you can look into are the requests, impressions, clicks, revenue, show-rate( impressions/responses ), click-rate (clicks/impressions) or any other feature which you think will be helpful to gain more insight about any anomaly.