Experiment No :- 2

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Sign and Grade	

AIM : To study a Web Analytics Tool

Theory:

1. What is Web Analytics?

Web analytics refers to the process of collecting, analyzing, and interpreting data about the behavior of visitors on a website. The primary goal is to track how users interact with a website, how they arrived at the site, and what actions they take while navigating it. Web analytics helps businesses and website owners understand their audience, improve user experience, optimize marketing strategies, and measure the effectiveness of their efforts. By monitoring metrics such as page views, session duration, bounce rates, and conversion rates, web analytics provides actionable insights that inform decisions and enhance website performance.

2. Web Analytics Tools and Their Features:
There are several web analytics tools available, each with its features. Some prominent ones include:

a. Google Analytics:
 - **Features:**
   - ➤ Tracks user behavior and website traffic.
   - ➤ Provides data on user demographics, session durations, and page views.
   - ➤ Allows goal tracking (e.g., form submissions, purchases).
   - ➤ Offers real-time analytics and customizable reports.
   - ➤ Integration with Google Ads for marketing insights.

b. Adobe Analytics:
 - **Features:**
   - ➤ Advanced segmentation for analyzing user behaviors.
   - ➤ Real-time data collection and insights.
   - ➤ Cross-channel tracking (web, mobile apps, etc.).
   - ➤ Predictive analytics for customer behavior.
   - ➤ Customizable dashboards and reports.

c. Hotjar:
  - **Features:**
    - ➢ Heatmaps to visualize where users click, scroll, and hover.
    - ➢ Session recordings to replay user interactions.
    - ➢ Surveys and feedback polls to gather user insights.
    - ➢ Conversion funnels to identify where users drop off.

d. Matomo (formerly Piwik):
  - **Features:**
    - ➢ Provides complete control over data with on-premise hosting.
    - ➢ Real-time analytics and visitor tracking.
    - ➢ Goal conversion tracking and e-commerce analytics.
    - ➢ Heatmaps, session recordings, and form analytics.
    - ➢ Integrates with various CMS and e-commerce platforms.

e. Crazy Egg:
  - **Features:**
    - ➢ Visual heatmaps showing user interactions on pages.
    - ➢ Scrollmaps to see how far users scroll on a page.
    - ➢ A/B testing to compare different page versions.
    - ➢ Session replays to observe how users navigate your site.
    - ➢ Conversion tracking to measure website performance.

3. Why is it Important to Learn Web Analytics?

Learning web analytics is essential for any website owner or digital marketer because it provides valuable insights into how users interact with your site. By understanding your audience's behavior, preferences, and challenges, you can make informed decisions to improve user experience and optimize website performance. Web analytics helps in identifying successful strategies, pinpointing areas that need improvement, and measuring the impact of changes.

## 4. Key Performance Indicators (KPIs) for Your Website:

KPIs are metrics that help evaluate the success of a website. Common KPIs include:
- Traffic: Number of visitors (new and returning).
- Bounce rate: Percentage of visitors who leave after viewing one page.
- Average session duration: Average time a user spends on the site.
- Conversion rate: Percentage of visitors who complete a desired action (e.g., purchases, sign-ups).
- Page load time: Time it takes for a page to fully load.
- Exit rate: Percentage of visitors who leave the site from a specific page.
- Pages per session: Average number of pages viewed per visit.

1. show landing page of Google Analytics, where it shows the basic analytics of website like users, event counts (like scroll, click), conversion rate & new users.
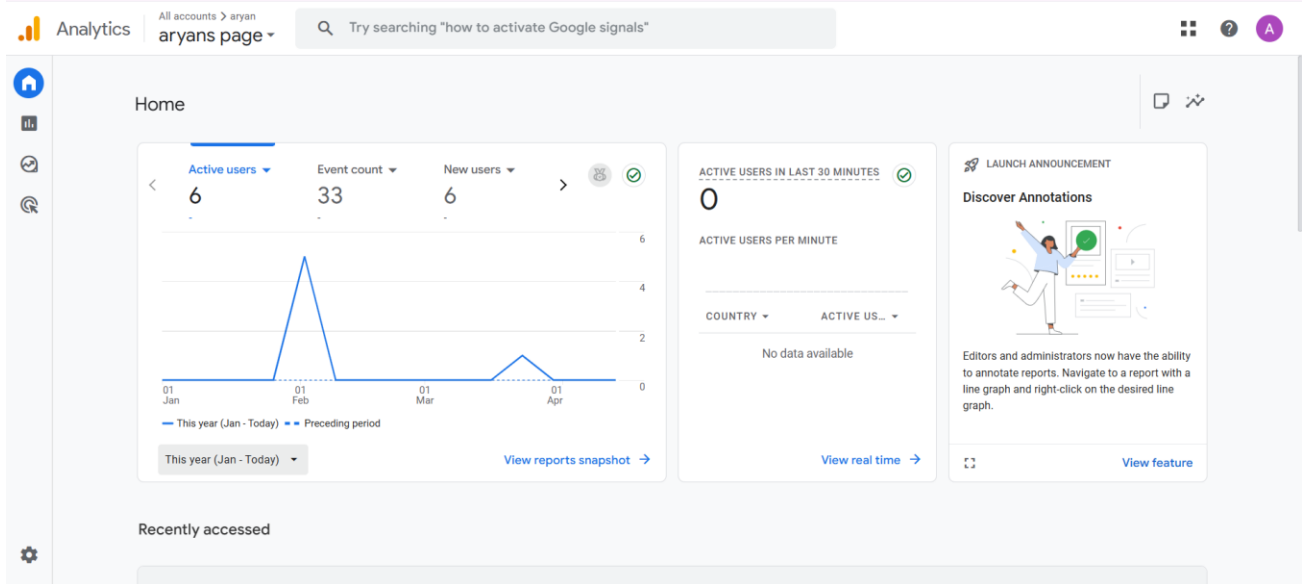

2.
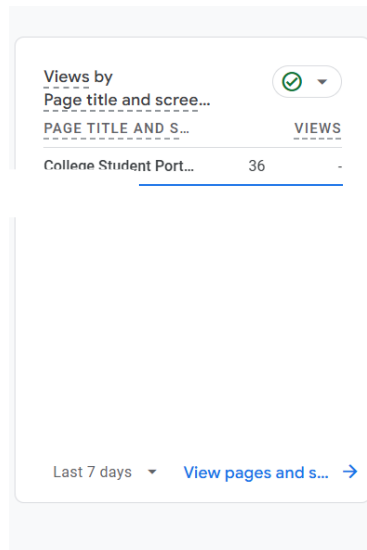
Website shows that in the last 7 days, there were 6 active users generating 33 events. All users were new during this period, with no key events recorded. The trend graph suggests a fluctuating pattern in user activity, with a notable spike on February 9th. No active users were recorded in the last 30 minutes at the time of this report. This highlights that user engagement has been intermittent but shows some growth in recent activity.
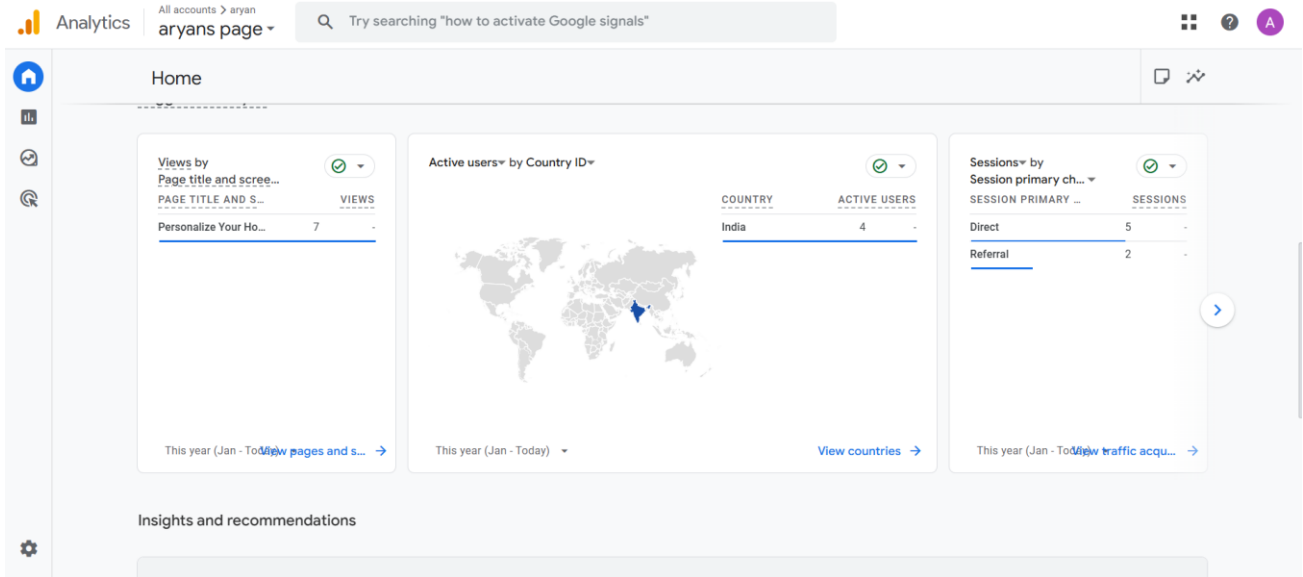
3.
Show demographic information of user base

The geographical analysis of your portfolio website indicates that in the last 7 days, 15 active users were from India. This highlights that the majority of your website's traffic comes from this region, suggesting localized interest or targeted reach within India. This insight can help in tailoring content or promotions specifically for this audience to enhance engagement.

4. shows how my website url is visited 'direct' if it is directly searched and visited 'referal' if it redirected through any third party website.
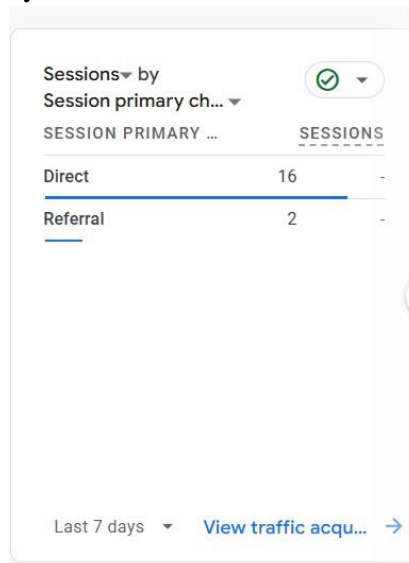
Web analysis of the portfolio website over the past seven days shows a total of 18 sessions, with 16 coming from direct traffic and 2 from referral sources. The high direct traffic suggests that visitors are accessing your site by typing the URL directly or using saved bookmarks, indicating prior awareness or personal outreach. The lower referral traffic implies limited external website or social media mentions, which could be improved by increasing backlinks and promotional efforts.

5. shows what all events have been done by users on website for example:53 people viewed the page.

WHAT ARE YOUR TOP EVENTS?

Event count by Event name

| EVENT NAME	EVENT COUNT
page_view	36
scroll	30
session_start	18
first_visit	17
user_engagement	15
form_submit	9
form_start	8

View events →

Website's event tracking data shows that "page_view" (36) and "scroll" (30) are the most frequent actions, indicating that visitors are actively browsing your content. The "session_start" (18) and "first_visit" (17) metrics suggest a steady flow of new users, with a decent engagement level reflected in 15 "user_engagement" events. Additionally, "form_submit" (9) and "form_start" (8) indicate that some users are interacting with forms, suggesting interest in your offerings but with potential for optimization to improve conversion rates.

HOW ARE ACTIVE USERS TRENDING?
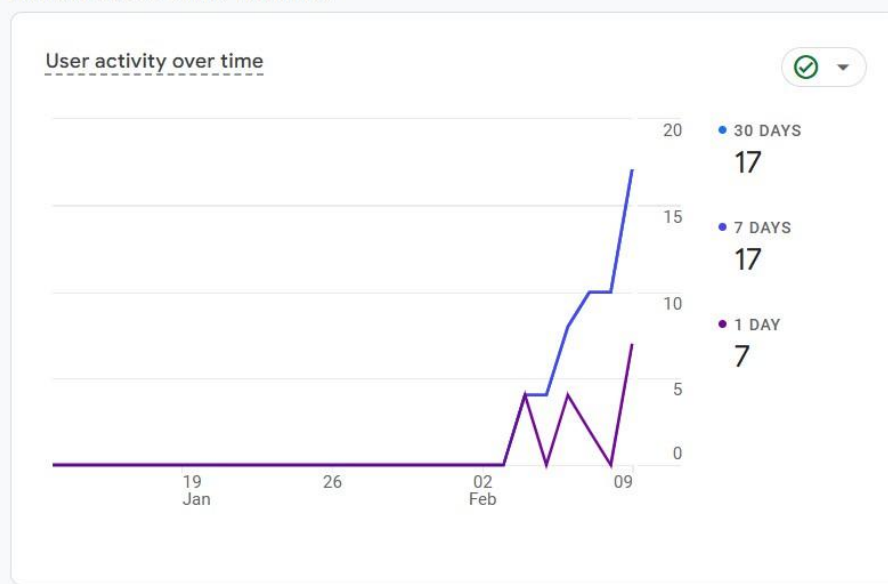
Website has seen an upward trend in active users, with 17 users in the past 7 days and the same count over 30 days, indicating recent growth. The spike in user activity around early February suggests increased visibility or promotion efforts. Additionally, 7 users visited in a single day, showing a promising engagement pattern.

6. Show the user activity over the past 7 days, after adding Google Analytics script to website.
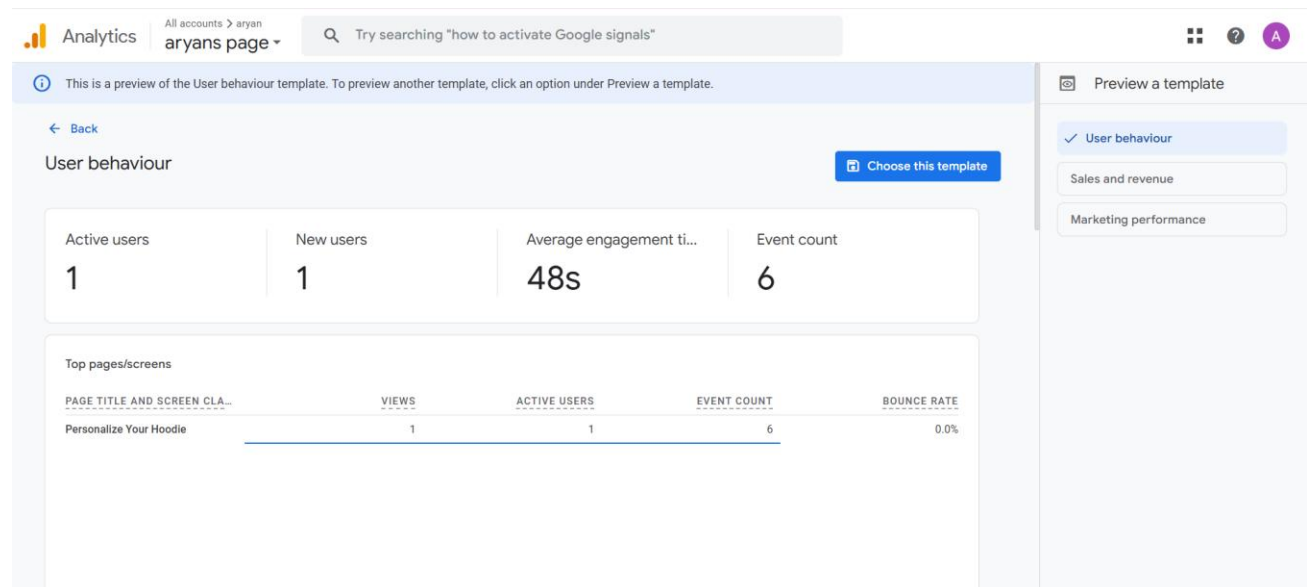
The analysis of your portfolio website reveals that it has received 36 views in the last 28 days from 17 active users, with an average of 2.12 views per user. The average engagement time per user was 1 minute and 5 seconds. The activity on the site appears to have increased significantly after February 3rd, as shown by the spike in views during this period. No revenue or key events have been recorded during this time frame.

CONCLUSION :

In this experiment, we delved into the importance of web analytics in understanding user behavior and evaluating website performance. By exploring tools like Google Analytics, Adobe Analytics, Hotjar, Matomo, and Crazy Egg, we discovered how these platforms offer valuable insights into user activity, traffic sources, and performance metrics.

Using Google Analytics on a website allows businesses to monitor key data such as user visits, conversion rates, and engagement patterns. These analytics empower businesses to refine website layouts, enhance marketing strategies, and deliver a better user experience. In conclusion, mastering web analytics is critical for making informed decisions that foster growth and success in the digital landscape.