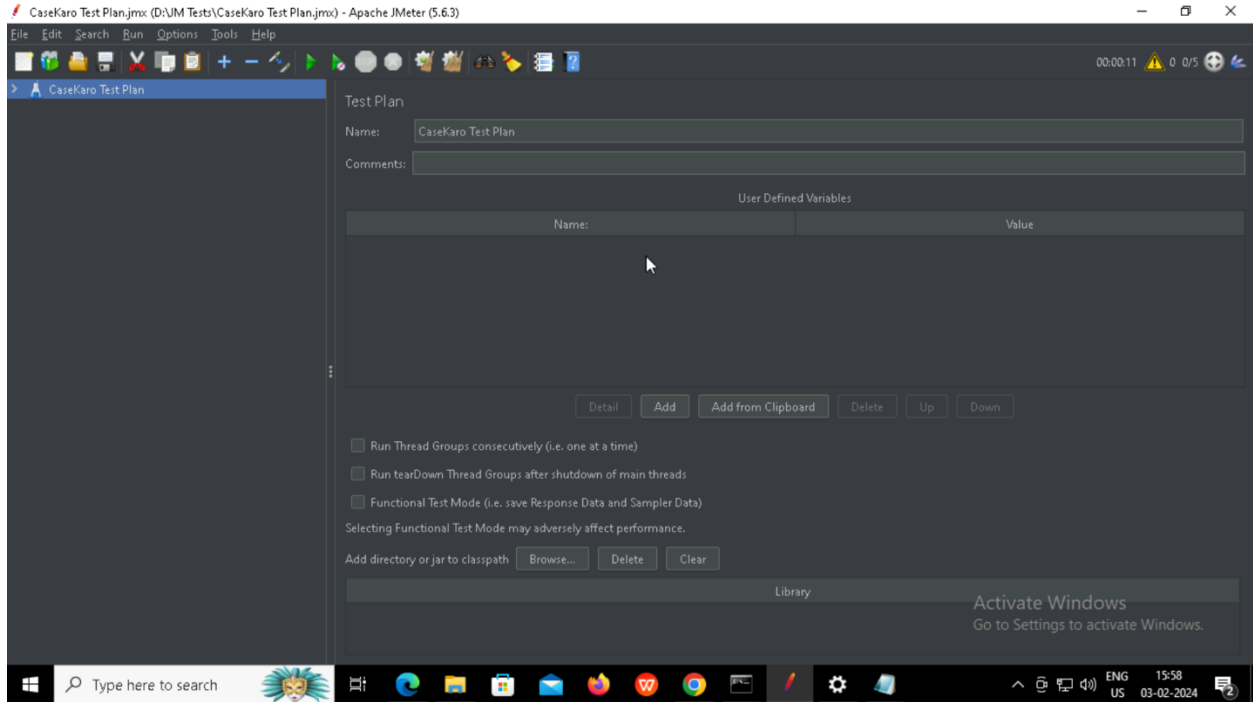
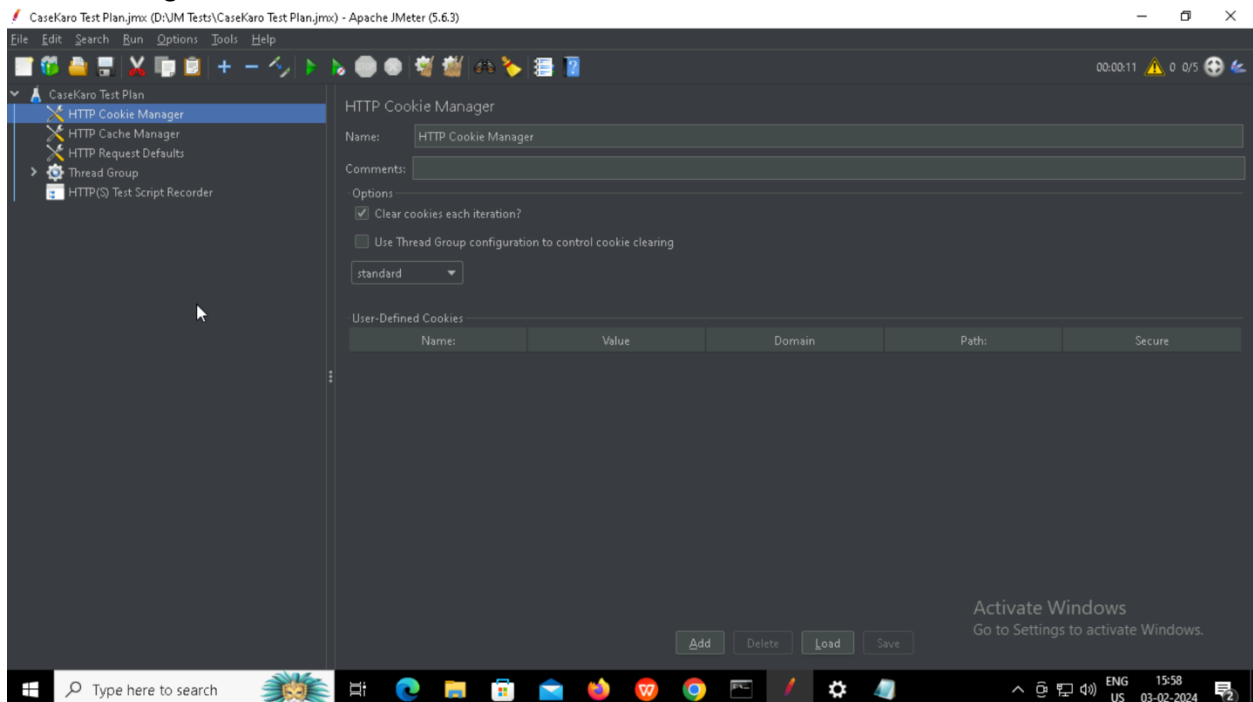


# Case study: CaseKaro

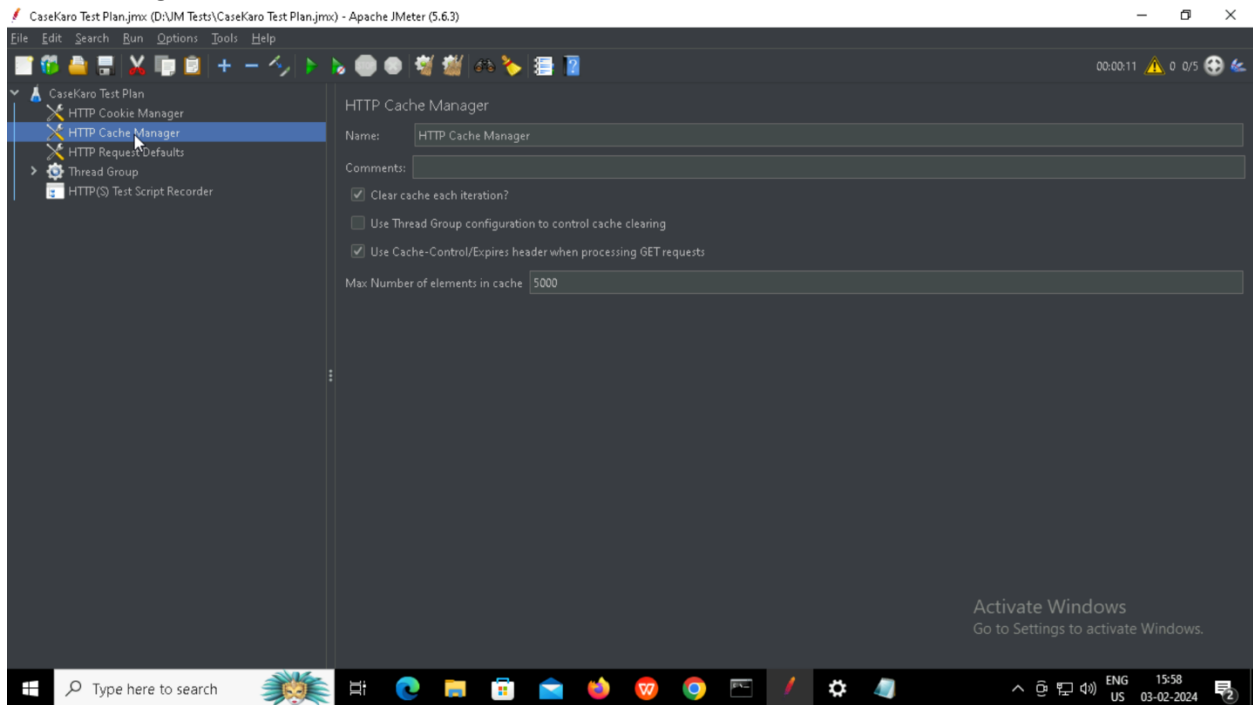
## Created test plan



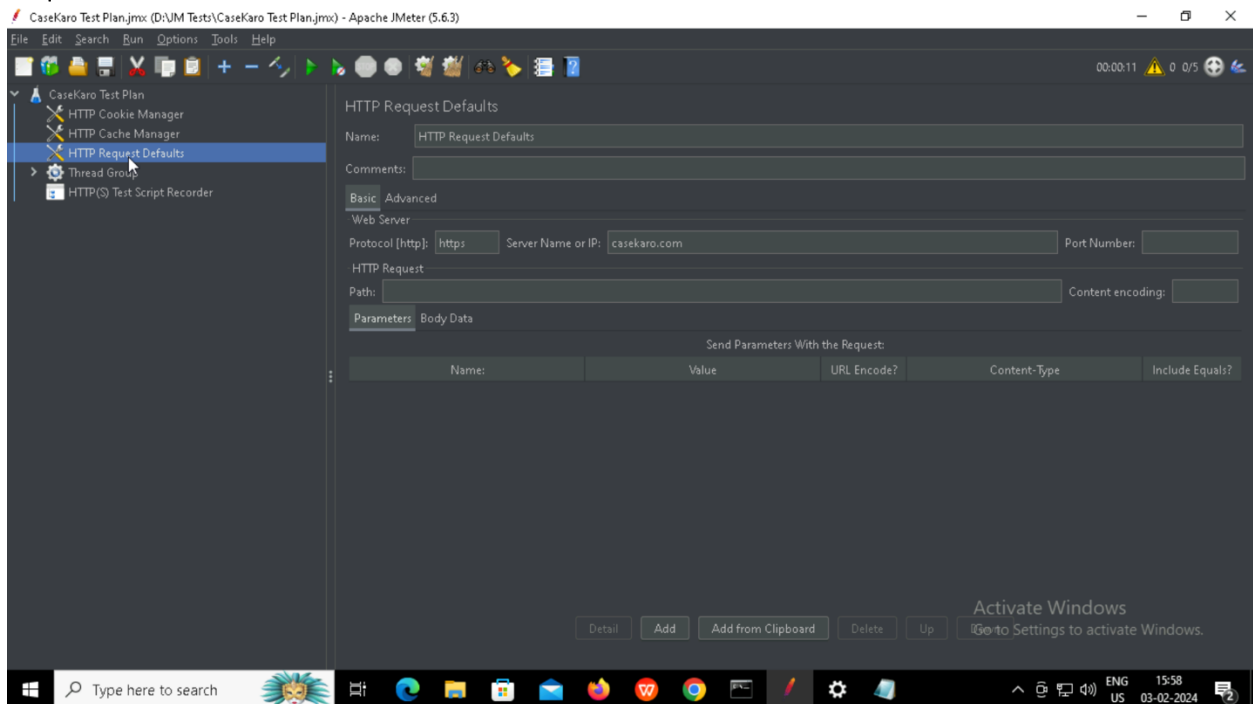
## Cookie Manager



## Cache Manager



## Request Defaults



The screenshot displays the Apache JMeter interface. On the left, the 'Test Plan' tree is visible, with 'HTTP(S) Test Script Recorder' highlighted. The main workspace shows the configuration for this recorder. The 'Name' field is set to 'HTTP(S) Test Script Recorder'. The 'State' is 'Ready to Run'. Under 'Global Settings', the 'Port' is '8888' and 'HTTPS Domains' is empty. The 'Test Plan Creation' section shows 'Target Controller' set to 'Use Recording Controller', 'Grouping' set to 'Do not group samplers', and three checkboxes: 'Capture HTTP Headers' (checked), 'Add Assertions' (checked), and 'Regex matching' (unchecked). The 'HTTP Sampler settings' section includes 'Transaction name' set to 'product', 'Naming scheme' set to 'Prefix', and 'Counter start value' set to '1'. The 'Create new transaction after request (ms)' field is empty. The 'Recording's default encoding' is set to 'UTF-8'. The bottom status bar shows the system clock as 15:59 on 03-02-2024.

The screenshot displays the Apache JMeter interface. On the left, the 'CaseKaro Test Plan' is expanded, showing various components like 'HTTP Cookie Manager', 'HTTP Cache Manager', and 'HTTP Request Defaults'. The 'HTTP(S) Test Script Recorder' is selected. The main configuration area on the right shows the following settings:

- Name:** HTTP(S) Test Script Recorder
- Comments:** (empty)
- State:** (empty)
- Global Settings:**
  - Port:** 8889
  - HTTP(S) Domains:** (empty)
- Test Plan Creation:** Requests Filtering
- Content-type filter:** (empty)
- Include:** (empty) **Exclude:** (empty)
- URL Patterns to Include:** (empty)
- URL Patterns to Exclude:** (empty)

Buttons for 'Start', 'Stop', 'Restart', 'Add', 'Delete', and 'Add from Clipboard' are visible. The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating 15:59 on 03-02-2024. An 'Activate Windows' watermark is present in the bottom right corner.

## Creating rules in YAML file

```
casekarorules - Notepad
File Edit Format View Help
groups:
- name: casekaro_rule
  rules:
  - alert: PrometheusTargetDown
    expr: up{job="casekaro"} == 0
    for: 1m
    annotations:
      summary: "Prometheus target is down"
      description: "Target '{{ $labels.instance }}' is down (up == 0)"

Ln 7, Col 21  100% Windows (CRLF) UTF-8
```

Activate Windows  
Go to Settings to activate Windows.

## Configuring prometheus YAML file with new rule

```
prometheus - Notepad
File Edit Format View Help
# my global config
global:
  scrape_interval: 15s # Set the scrape interval to every 15 seconds. Default is every 1 minute.
  evaluation_interval: 15s # Evaluate rules every 15 seconds. The default is every 1 minute.
  # scrape_timeout is set to the global default (10s).

# Alertmanager configuration
alerting:
  alertmanagers:
    - static_configs:
      - targets:
        # - alertmanager:9093

# Load rules once and periodically evaluate them according to the global 'evaluation_interval'.
rule_files:
  - "D:/prometheus-2.49.1.windows-amd64/prometheus-2.49.1.windows-amd64/rules/casekarorules.yml"
  - "second_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:
# Here it's Prometheus itself.
scrape_configs:
  # The job name is added as a label 'job=<job_name>' to any timeseries scraped from this config.

  - job_name: "prometheus"

    # metrics_path defaults to '/metrics'
    # scheme defaults to 'http'.

    static_configs:
      - targets: ["localhost:9099"]

  - job_name: "google-blackbox"
    metrics_path: /probe

Ln 15, Col 12  100% Unix (LF) UTF-8
```

Activate Windows  
Go to Settings to activate Windows.

## Setting target as localhost:9270

```
prometheus - Notepad
File Edit Format View Help

# A scrape configuration containing exactly one endpoint to scrape:
# Here it's Prometheus itself.
scrape_configs:
  # The job name is added as a label 'job=<job_name>' to any timeseries scraped from this config.

  - job_name: "prometheus"

    # metrics_path defaults to '/metrics'
    # scheme defaults to 'http'.

    static_configs:
      - targets: ["localhost:9090"]

  - job_name: "google-blackbox"
    metrics_path: /probe
    params:
      module: [http_2xx] # Use the module defined in your blackbox.yml
    static_configs:
      - targets: ["localhost:9115"]

  - job_name: "reqres-blackbox"
    metrics_path: /probe
    params:
      module: [http_2xx] # Use the module defined in your blackbox.yml
      target: ['http://reqres.in']
    static_configs:
      - targets: ["localhost:9115"]

  - job_name: "casekaro"
    static_configs:
      - targets: ["localhost:9270"]
```

## Metrics in the target

```
Mobile Cover - Buy Mob... x Save Big: Get the Spider... x Prometheus Time Series... x 4b86fbfde0f516:9270/metrics x CaseKaro - Dashboards... x +
4b86fbfde0f516:9270/metrics
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0356-A_300x300.jpg-397",} 1.0
jmeter_succ_count_total{label="homepage/~44",} 2.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0356-A_300x300.jpg-378",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shopifycloud/boomerang/shopify-boomerang-1.0.0.min.js-375",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0594-A_300x300.jpg-396",} 1.0
jmeter_succ_count_total{label="iphone15/.well-known/shopify/monorail/unstable/produce_batch-360",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0463-A_300x300.jpg-373",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0422-A_300x300.jpg-384",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0544-A_300x300.jpg-391",} 1.0
jmeter_succ_count_total{label="iphone15/checkouts/internal/preloads.js-376",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0354-A_300x300.jpg-385",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0523-A_300x300.jpg-381",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0611-A_300x300.jpg-382",} 1.0
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0452-A_300x300.jpg-400",} 1.0
# HELP process_cpu_seconds_total Total user and system CPU time spent in seconds.
# TYPE process_cpu_seconds_total counter
process_cpu_seconds_total 178.3125
# HELP process_start_time_seconds Start time of the process since unix epoch in seconds.
# TYPE process_start_time_seconds gauge
process_start_time_seconds 1.706951738937E9
# HELP res_code_total default help string
# TYPE res_code_total counter
res_code_total 8.0
# HELP jvm_memory_objects_pending_finalization The number of objects waiting in the finalizer queue.
# TYPE jvm_memory_objects_pending_finalization gauge
jvm_memory_objects_pending_finalization 0.0
# HELP jvm_memory_bytes_used Used bytes of a given JVM memory area.
# TYPE jvm_memory_bytes_used gauge
jvm_memory_bytes_used(area="heap",) 9.3184304E7
jvm_memory_bytes_used(area="nonheap",) 1.63423496E8
# HELP jvm_memory_bytes_committed Committed (bytes) of a given JVM memory area.
# TYPE jvm_memory_bytes_committed gauge
jvm_memory_bytes_committed(area="heap",) 1.073741824E9
jvm_memory_bytes_committed(area="nonheap",) 1.70672128E8
# HELP jvm_memory_bytes_max Max (bytes) of a given JVM memory area.
# TYPE jvm_memory_bytes_max gauge
jvm_memory_bytes_max(area="heap",) 1.073741824E9
jvm_memory_bytes_max(area="nonheap",) 1.70672128E8
```

## Alert fired in prometheus

The screenshot shows the Prometheus Alerts page in a web browser. The URL is `localhost:9090/alerts?search=`. The page header includes the Prometheus logo and navigation links: Alerts, Graph, Status, and Help. Below the header, there are status indicators: Inactive (0), Pending (0), and Firing (1). A search bar is present with the text "Filter by name or labels". The main content area shows a list of alerts. The first alert is titled "PrometheusTargetDown (1 active)" and is in a "FIRING" state. The alert details are as follows:

- name: PrometheusTargetDown
- expr: up{job="casekaro"} == 0
- for: 1m
- annotations:
  - description: Target '{{ \$labels.instance }}' is down (up == 0)
  - summary: Prometheus target is down

Labels	State	Active Since	Value
alertname=PrometheusTargetDown instance=localhost:9270 job=casekaro	FIRING	2024-02-03T09:49:52.112068459Z	0

The Windows taskbar is visible at the bottom of the screen.

## Final dashboard

The screenshot shows a Grafana dashboard titled "CaseKaro" with four panels. The top navigation bar includes a search bar and a "Search or jump to..." dropdown. The dashboard panels are as follows:

- Ratio Success total (Homepage)**: A bar chart showing two bars, both with a value of 3. The x-axis labels are "15:14:00" and "15:14:45". The y-axis ranges from 0 to 6.
- Ratio failure total (Homepage)**: A bar chart showing two bars, both with a value of 0. The x-axis labels are "15:14:00" and "15:14:45". The y-axis ranges from 0 to 100.
- Process start time and cpu seconds**: Two gauge charts. The first gauge shows a value of 1706951739. The second gauge shows a value of 179.
- Ratio created v/s ratio failure created**: A pie chart showing a ratio of 1:1 (50% green, 50% yellow).

The Windows taskbar is visible at the bottom of the screen.

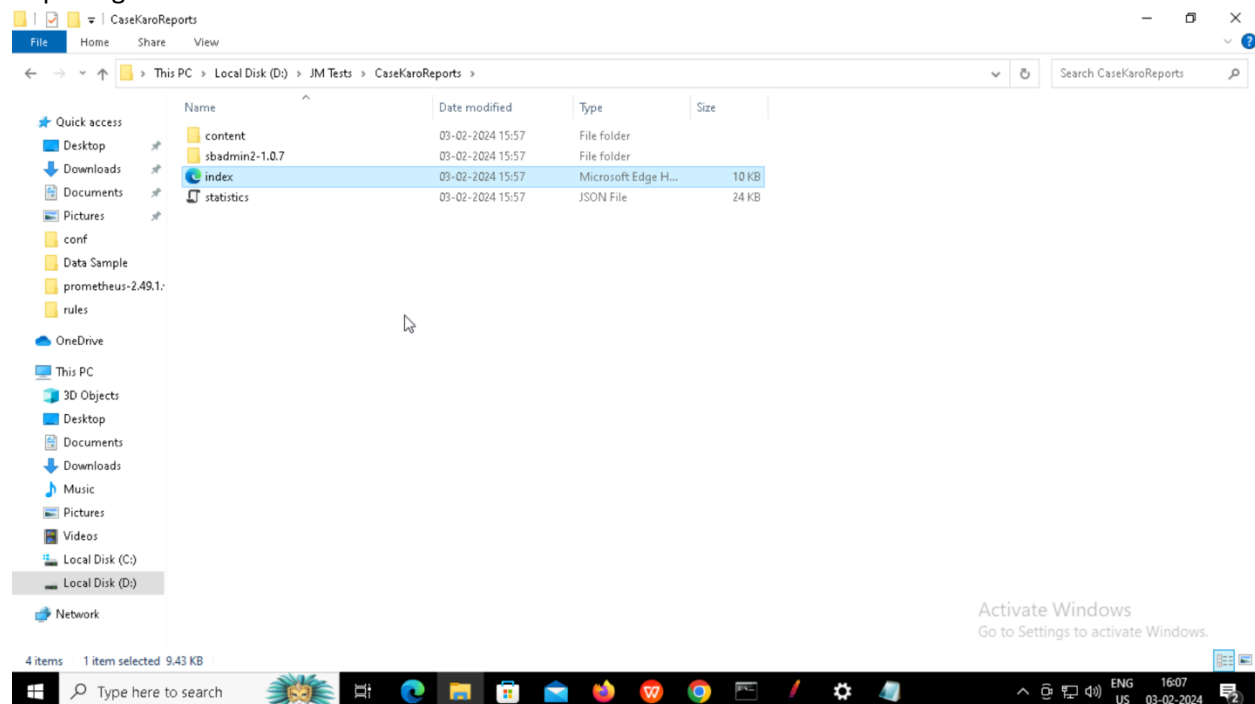
## Running jmeter tests in non GUI mode and generating logs and reports in specified destinations

```
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19045.3324]
(c) Microsoft Corporation. All rights reserved.

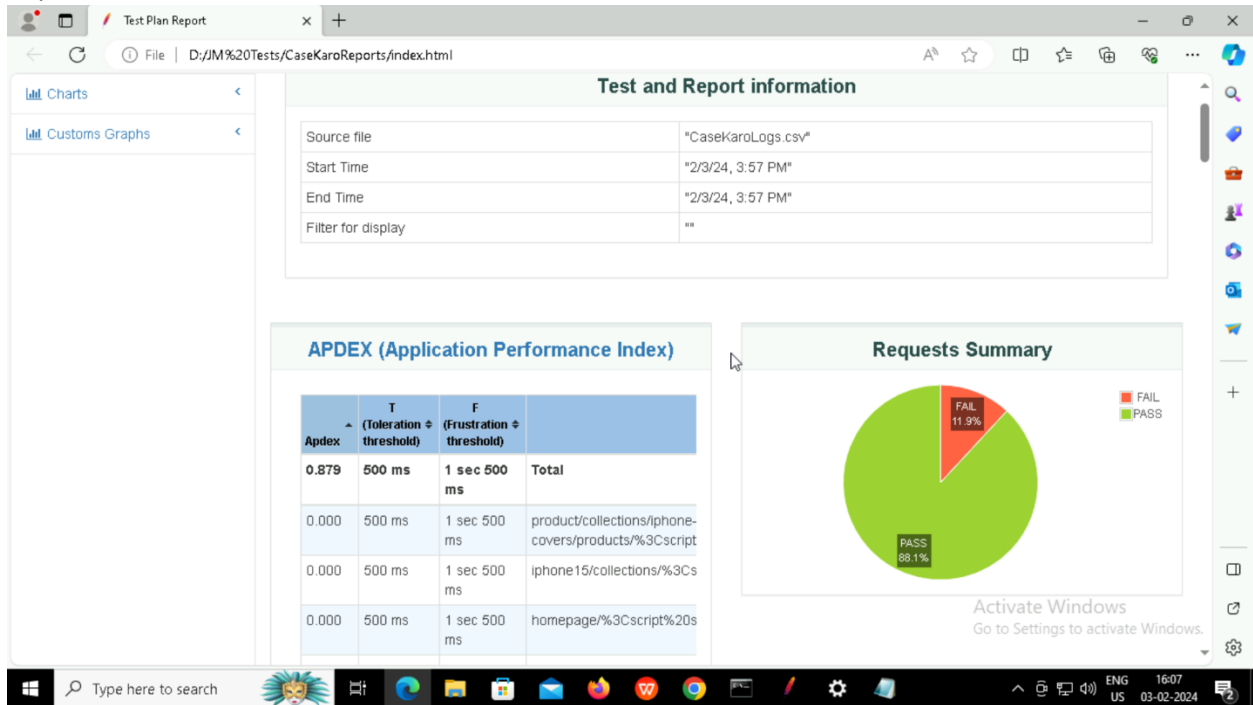
D:\apache-jmeter-5.6.3\bin>jmeter -n -t "D:/JM Tests/CaseKaro Test Plan.jmx" -l "D:/JM Tests/CaseKaroLogs.csv" -e -o "D:/JM Tests/CaseKaroReports"
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
Creating summariser <summary>
Created the tree successfully using D:/JM Tests/CaseKaro Test Plan.jmx
Starting standalone test @ 2024 Feb 3 15:57:15 IST (1706956035071)
Waiting for possible Shutdown/StopTestNow/HeapDump/ThreadDump message on port 4445
Warning: Nashorn engine is planned to be removed from a future JDK release
summary = 210 in 00:00:12 = 16.8/s Avg: 100 Min: 45 Max: 654 Err: 25 (11.90%)
Tidying up ... @ 2024 Feb 3 15:57:28 IST (1706956048298)
... end of run

D:\apache-jmeter-5.6.3\bin>
```

## Reports generated



## Report Index file



## Log file as csv

CaseKaroLogs.csv

Home Insert Page Layout Formulas Data Review View Tools Smart Toolbox

Calibri 11

Format Painter Paste Format Painter

General Rows and Columns Worksheet

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
timestamp	elapsed	label	responseC	responseM	threadNam	dataT	success	failureMes	bytes	sentBytes	grpThreads	allThreads	URL	Latency	IdleTime	Connect
1.707E+12	654	homepage/	200 OK	Thread Gro	text		TRUE		31037	668	1	1	https://cas	653	0	442
1.707E+12	144	homepage/	404 Not Found	Thread Gro	text		FALSE		25622	1165	1	1	https://cas	144	0	0
1.707E+12	145	mobilecove	200 OK	Thread Gro	text		TRUE		26808	1358	1	1	https://cas	145	0	0
1.707E+12	200	mobilecove	404 Not Found	Thread Gro	text		FALSE		25572	1195	1	1	https://cas	200	0	0
1.707E+12	216	apple/page	200 OK	Thread Gro	text		TRUE		26662	1382	1	1	https://cas	216	0	0
1.707E+12	151	apple/page	404 Not Found	Thread Gro	text		FALSE		25563	1195	1	1	https://cas	151	0	0
1.707E+12	140	iphone15/c	200 OK	Thread Gro	text		TRUE		36267	1391	1	1	https://cas	140	0	0
1.707E+12	65	iphone15/c	200 OK	Thread Gro	bin		TRUE		22875	1304	1	1	https://cas	65	0	0
1.707E+12	61	iphone15/c	200 OK	Thread Gro	bin		TRUE		9110	1304	1	1	https://cas	61	0	0
1.707E+12	171	iphone15/c	404 Not Found	Thread Gro	text		FALSE		25539	1210	2	2	https://cas	171	0	0
1.707E+12	68	iphone15/c	200 OK	Thread Gro	bin		TRUE		13637	1304	2	2	https://cas	67	0	0
1.707E+12	58	iphone15/c	200 OK	Thread Gro	bin		TRUE		23177	1304	2	2	https://cas	58	0	0
1.707E+12	282	homepage/	200 OK	Thread Gro	text		TRUE		31217	668	2	2	https://cas	282	0	119
1.707E+12	150	homepage/	404 Not Found	Thread Gro	text		FALSE		25459	1165	2	2	https://cas	150	0	0
1.707E+12	350	iphone15/.	200 OK	Thread Group 1-1			TRUE		1120	1836	2	2	https://cas	350	0	0
1.707E+12	169	mobilecove	200 OK	Thread Gro	text		TRUE		26844	1358	2	2	https://cas	168	0	0
1.707E+12	59	iphone15/c	200 OK	Thread Gro	bin		TRUE		7047	1304	2	2	https://cas	59	0	0
1.707E+12	68	iphone15/c	200 OK	Thread Gro	text		TRUE		20144	1239	2	2	https://cas	68	0	0
1.707E+12	77	iphone15/c	200 OK	Thread Gro	bin		TRUE		11351	1304	2	2	https://cas	77	0	0
1.707E+12	214	mobilecove	404 Not Found	Thread Gro	text		FALSE		25678	1195	2	2	https://cas	214	0	0

Activate Windows  
Go to Settings to activate Windows.