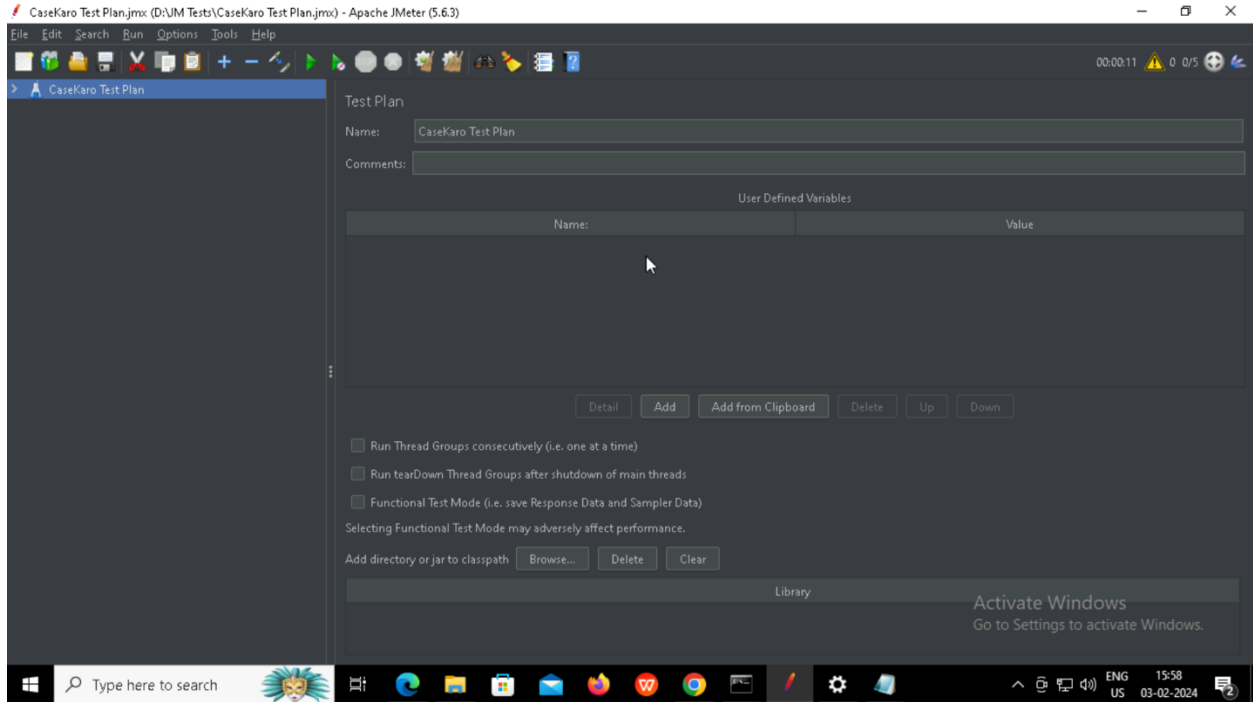
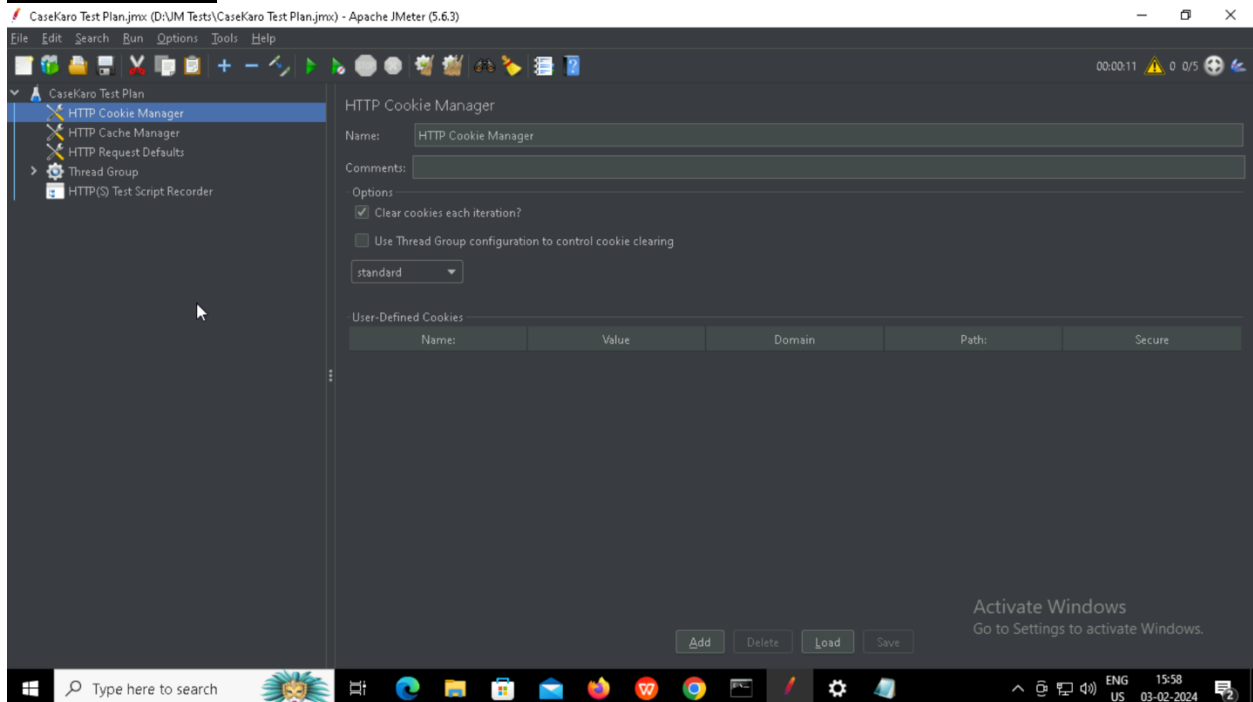


Case study: CaseKaro Explanation

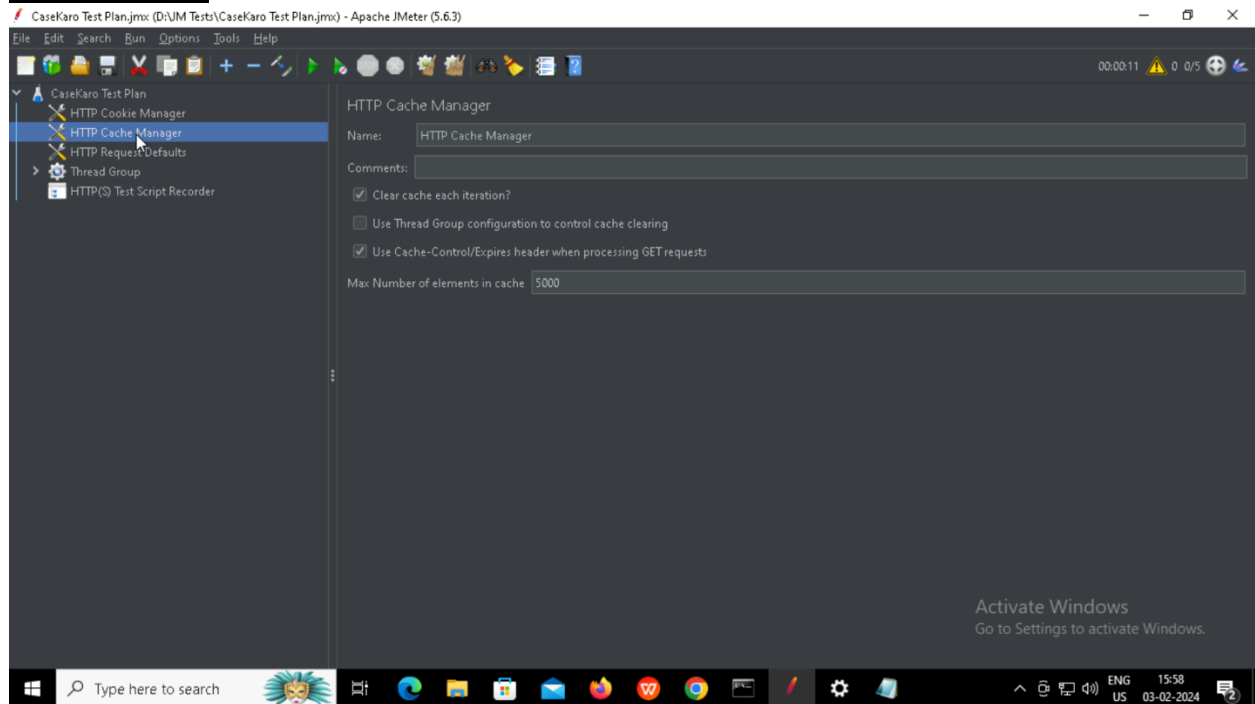
Created test plan



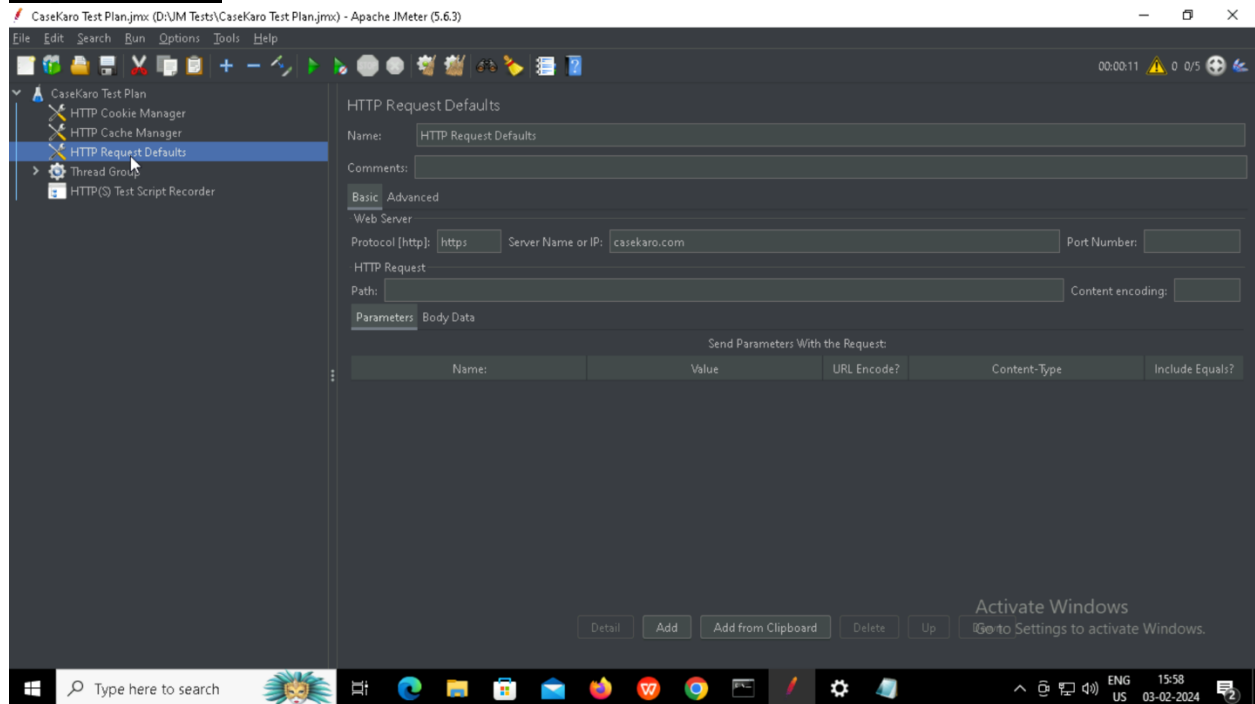
Cookie Manager



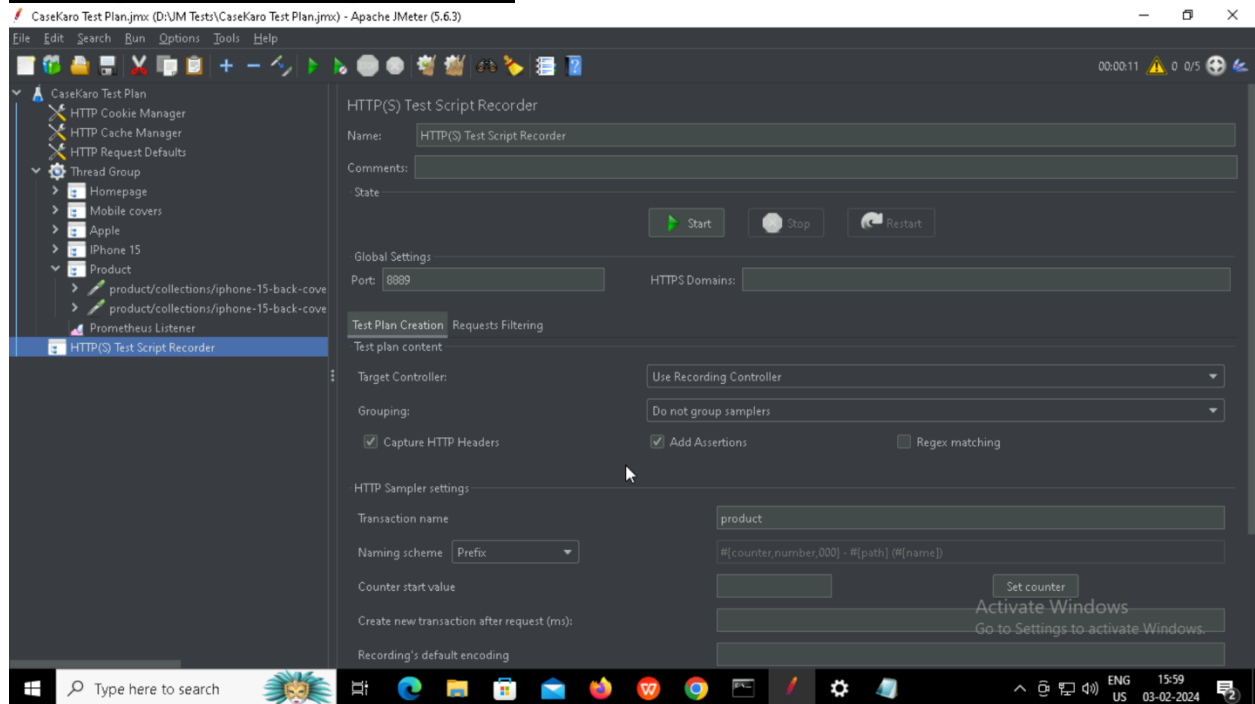
Cache Manager



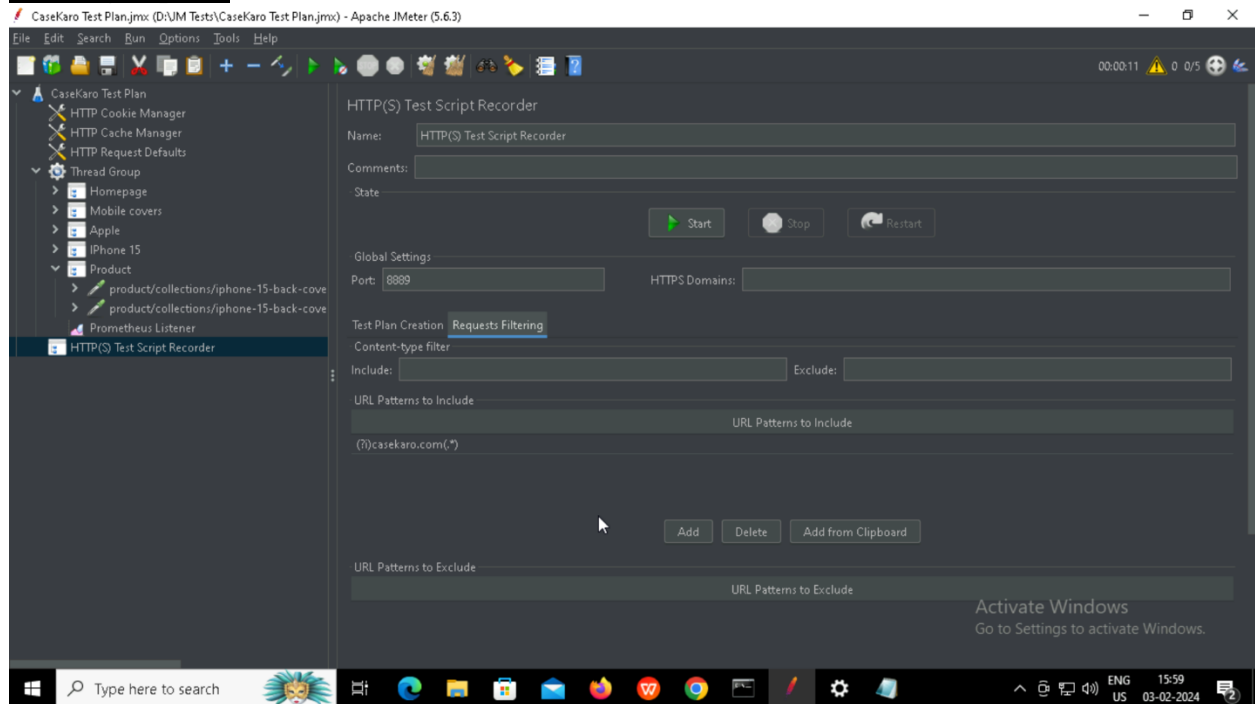
Request Defaults



Test script recorder – Test plan creation



Filtering requests



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 4b86fbffde0f516:9270/metrics x CaseKaro - Dashboards... x + - x
4b86fbffde0f516:9270/metrics
jmeter_succ_count_total{label="iphone15/cdn/shop/products/CK-0512-1P15-0356-A_300x300.jpg-371",} 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 interface in a web browser. The URL is `localhost:9090/alerts?search=`. The interface displays a list of alerts, with one alert in the 'Firing' state. The alert is titled 'PrometheusTargetDown (1 active)'. The alert details show the name 'PrometheusTargetDown', the expression 'up{job="casekaro"} == 0', and the for duration '1m'. The annotations include a description 'Target '{{ \$labels.instance }}' is down (up == 0)' and a summary 'Prometheus target is down'. A table below the alert details shows the labels, state, active since time, and value.

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

Final dashboard

The screenshot shows a Grafana dashboard titled 'CaseKaro'. The dashboard contains four panels:

- Ratio Success total (Homepage)**: A bar chart showing two bars with values 3 and 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 with values 0 and 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 50/50 split between two categories.

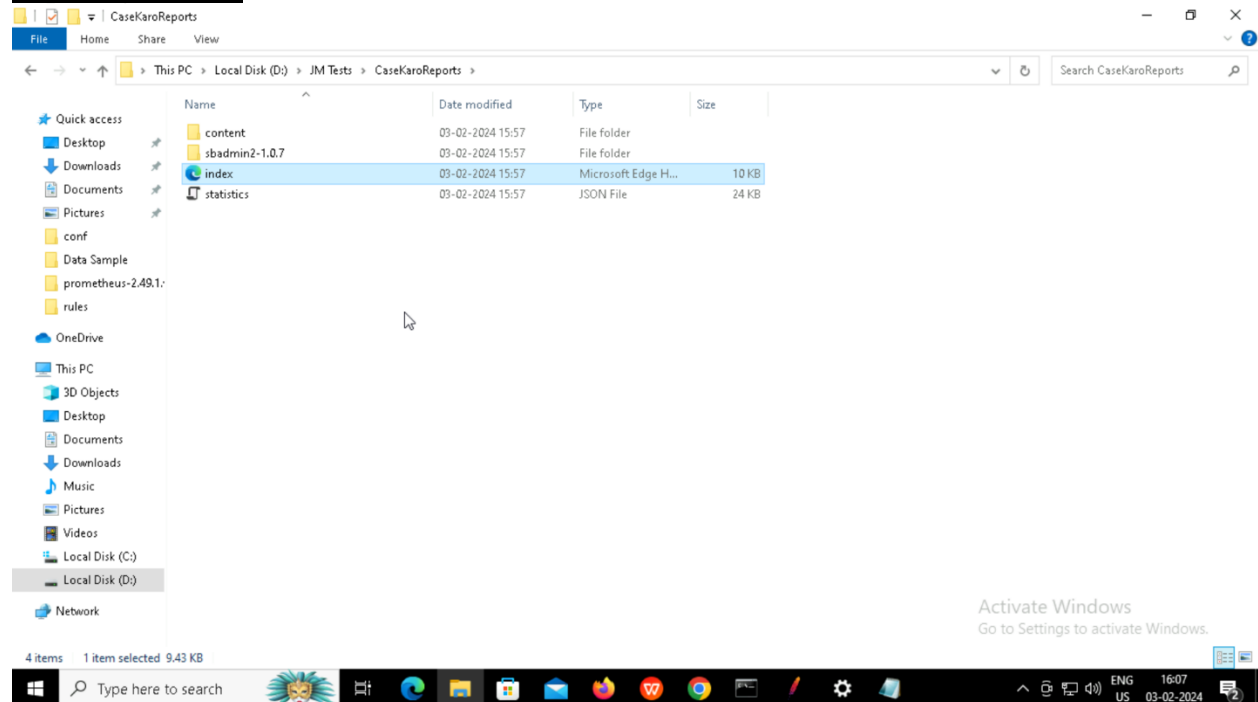
Without Gui Running Jmeter and generating log and reports

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

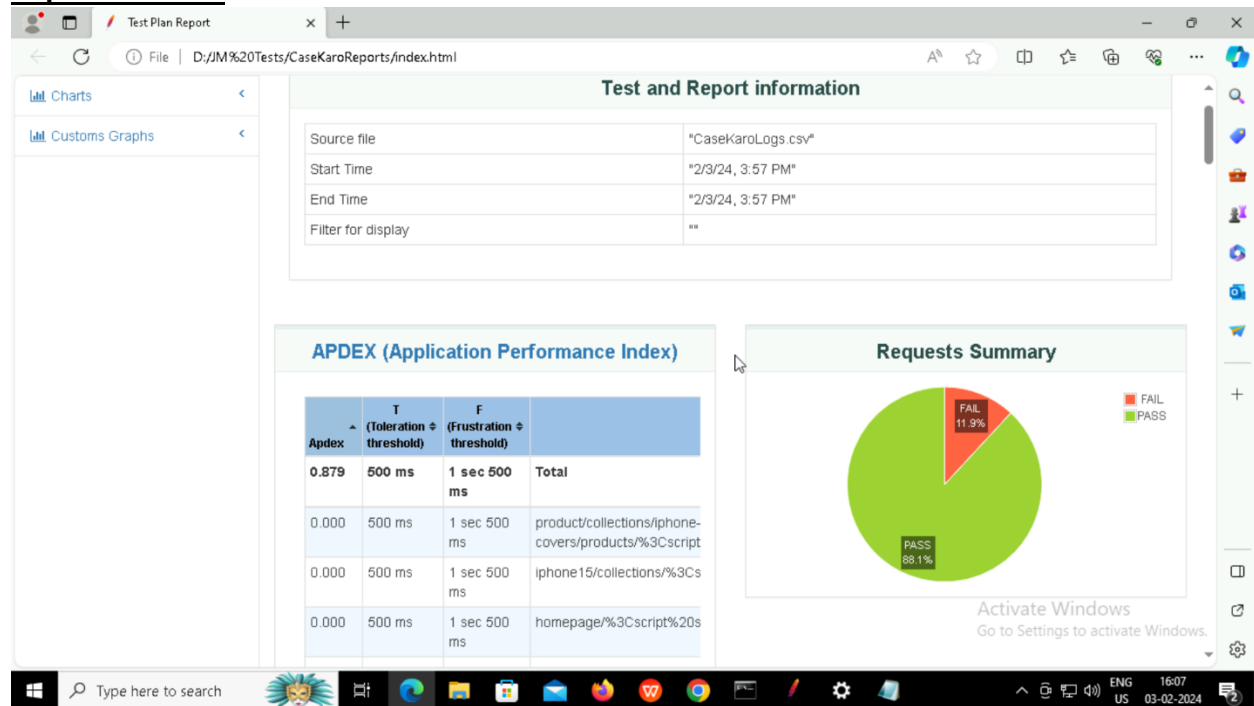
D:\apache-jmeter-5.6.3\bin>jmeter -n -t "D:/JM Tests/CaseKaro Test Plan.jmx" -l "D:/JM Tests/CaseKaroLogs.csv" -e -o "D:/JM Tests/CaseKaroReports"
WARN StatusConsoleListener The use of package scanning to locate plugins is deprecated and will be removed in a future release
WARN StatusConsoleListener 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

W Home

S CaseKaroLogs.csv

+

Menu

File

Home

Insert

Page Layout

Formulas

Data

Review

View

Tools

Smart Toolbox

Upgrade now

Format Painter

Paste

Calibri

11

A⁺

A⁻

Wrap Text

General

Rows and Columns

Worksheet

A1

fx

timeStamp

#	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q		
	timeStamp	elapsed	label	response	Cr	responseM	threadNam	data	Type	success	failureMes	bytes	sentBytes	grpThreads	allThreads	URL	Latency	IdleTime	Connect
1	1.707E+12	654	homepage/	200	OK		Thread Gro	text		TRUE			31037	668	1	1 https://cas	653	0	442
2	1.707E+12	144	homepage/	404	Not Found		Thread Gro	text		FALSE			25622	1165	1	1 https://cas	144	0	0
3	1.707E+12	145	mobilecove	200	OK		Thread Gro	text		TRUE			26808	1358	1	1 https://cas	145	0	0
4	1.707E+12	200	mobilecove	404	Not Found		Thread Gro	text		FALSE			25572	1195	1	1 https://cas	200	0	0
5	1.707E+12	216	apple/page	200	OK		Thread Gro	text		TRUE			26662	1382	1	1 https://cas	216	0	0
6	1.707E+12	151	apple/page	404	Not Found		Thread Gro	text		FALSE			25563	1195	1	1 https://cas	151	0	0
7	1.707E+12	140	iphone15/c	200	OK		Thread Gro	text		TRUE			36267	1391	1	1 https://cas	140	0	0
8	1.707E+12	65	iphone15/c	200	OK		Thread Gro	bin		TRUE			22875	1304	1	1 https://cas	65	0	0
9	1.707E+12	61	iphone15/c	200	OK		Thread Gro	bin		TRUE			9110	1304	1	1 https://cas	61	0	0
10	1.707E+12	171	iphone15/c	404	Not Found		Thread Gro	text		FALSE			25539	1210	2	2 https://cas	171	0	0
11	1.707E+12	68	iphone15/c	200	OK		Thread Gro	bin		TRUE			13637	1304	2	2 https://cas	67	0	0
12	1.707E+12	58	iphone15/c	200	OK		Thread Gro	bin		TRUE			23177	1304	2	2 https://cas	58	0	0
13	1.707E+12	282	homepage/	200	OK		Thread Gro	text		TRUE			31217	668	2	2 https://cas	282	0	119
14	1.707E+12	150	homepage/	404	Not Found		Thread Gro	text		FALSE			25459	1165	2	2 https://cas	150	0	0
15	1.707E+12	350	iphone15/c	200	OK		Thread Group 1-1			TRUE			1120	1836	2	2 https://cas	350	0	0
16	1.707E+12	169	mobilecove	200	OK		Thread Gro	text		TRUE			26844	1358	2	2 https://cas	168	0	0
17	1.707E+12	59	iphone15/c	200	OK		Thread Gro	bin		TRUE			7047	1304	2	2 https://cas	59	0	0
18	1.707E+12	68	iphone15/c	200	OK		Thread Gro	text		TRUE			20144	1239	2	2 https://cas	68	0	0
19	1.707E+12	77	iphone15/c	200	OK		Thread Gro	bin		TRUE			11351	1304	2	2 https://cas	77	0	0
20	1.707E+12	214	mobilecove	404	Not Found		Thread Gro	text		FALSE			26678	1195	2	2 https://cas	214	0	0

CaseKaroLogs

+

Activate Windows

Go to Settings to activate Windows.