



Shree Chanakya Education Society's

# Indira College of Commerce & Science, Wakad, Pune



Project Presentation

*“Efficient clustering algorithm  
to segregate tests  
on their execution behavior”*

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# AGENDA

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- What is this project about?
- Why this project is needed?
- H/W & S/W Requirements
- UML Diagrams
- Output
- Future Enhancements
- References



# What is this project about?

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- Regretion tests
- Automation
- Machine Learning



# Why this project needed ?

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- Related to my work
  - Existing system
  - Limitations
  - Manual work
  
- I'm Curious about
  - Artificial Intelligence
  - Data Science
  - Machine Learning
  
- Next generation's job opportunities
  - AI
  - Bio-technology
  - Nano-technology



# H/W & S/W Requirements

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## ➤ Hardware Requirements :

- ✓ 8 GB RAM
- ✓ Intel 4<sup>th</sup> generation or above processor

## ➤ Software Requirements :

- ✓ Windows/Linux

## ➤ Tools:

- ✓ Jupiter notebook
- ✓ matplotlib

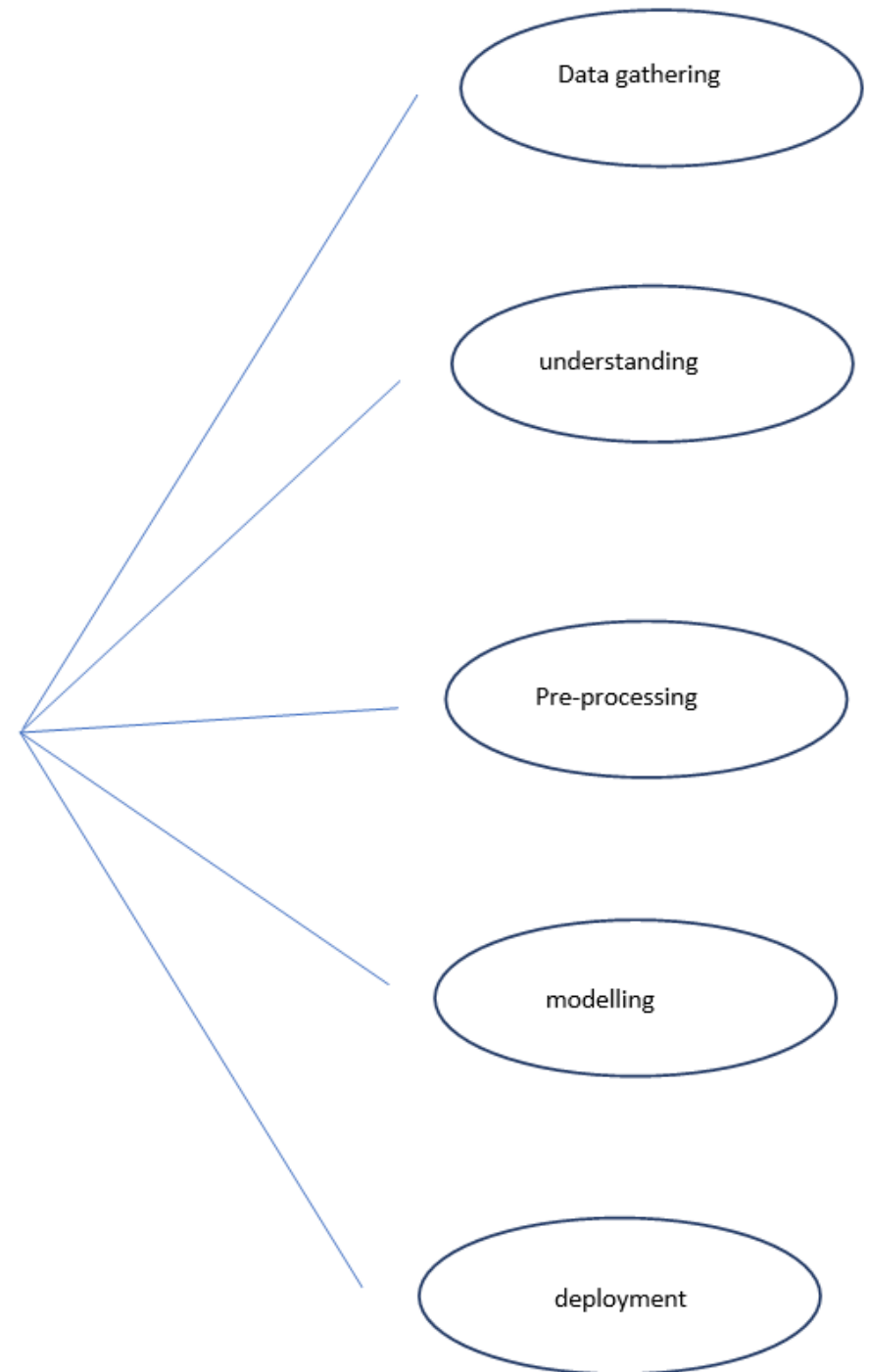
## ➤ Technology:

- ✓ Python 3.6 or greater



# UML Diagrams

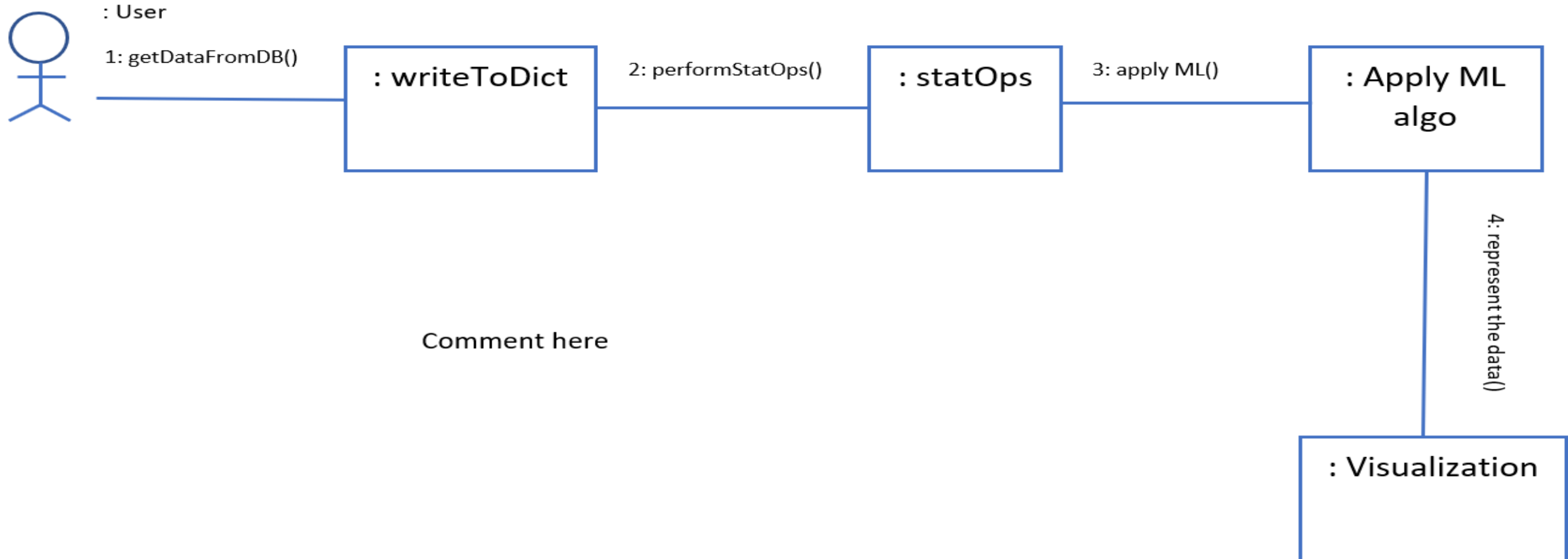
## Use Case Diagram







# UML Diagrams - Collaboration

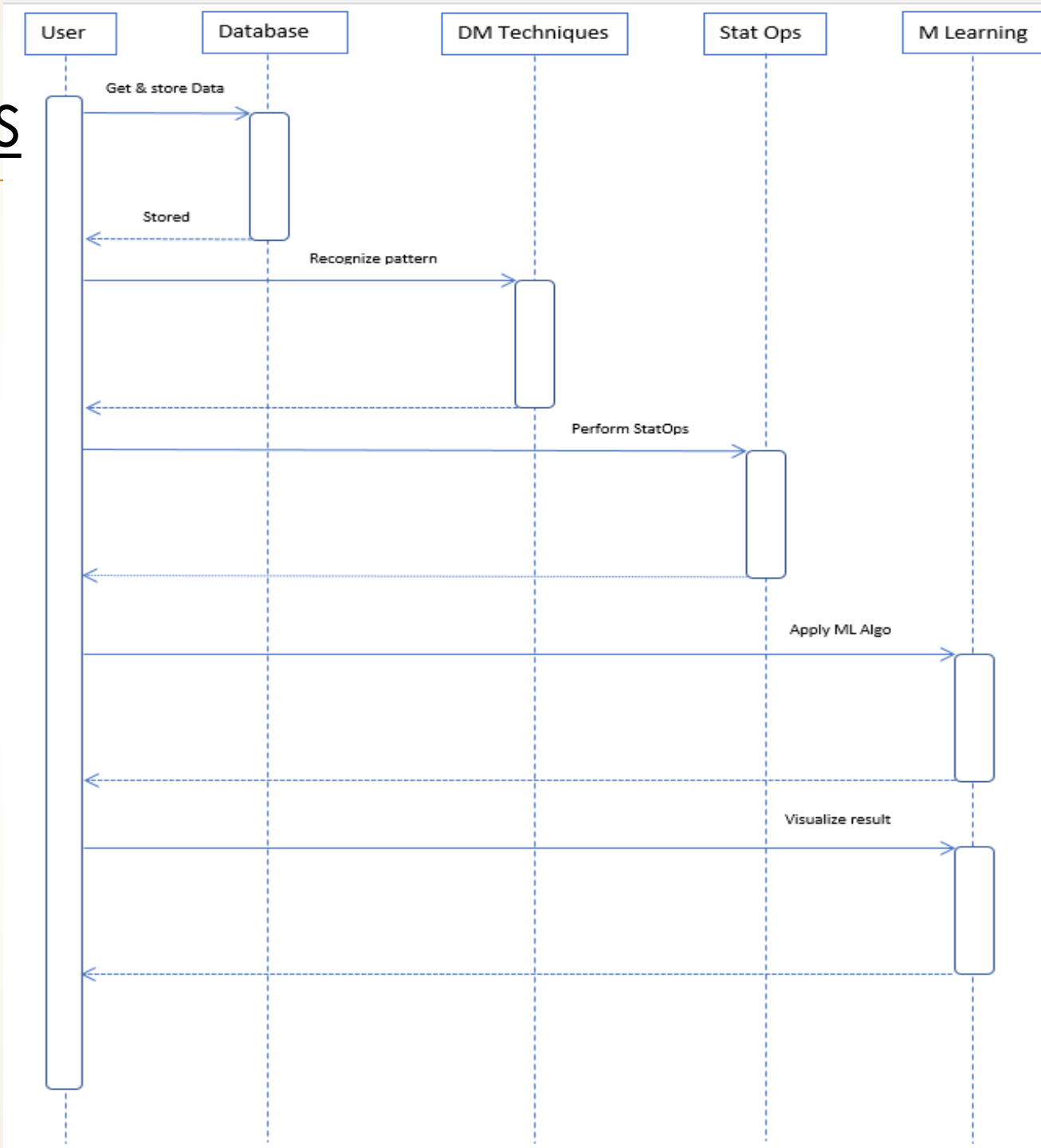


**Collaboration Diagram**



# UML Diagrams

## Sequence





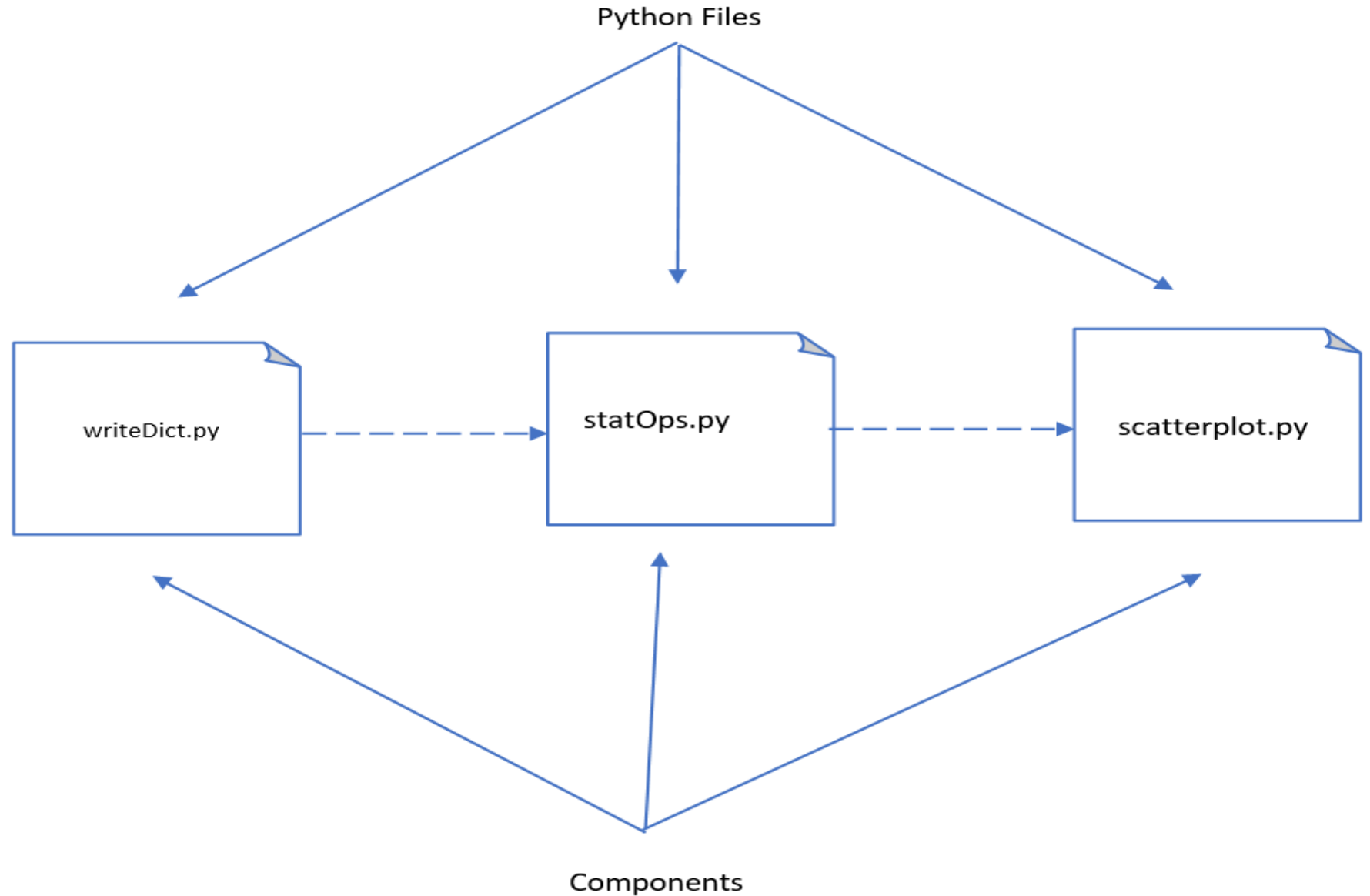


# UML Diagram

## Class Diagram



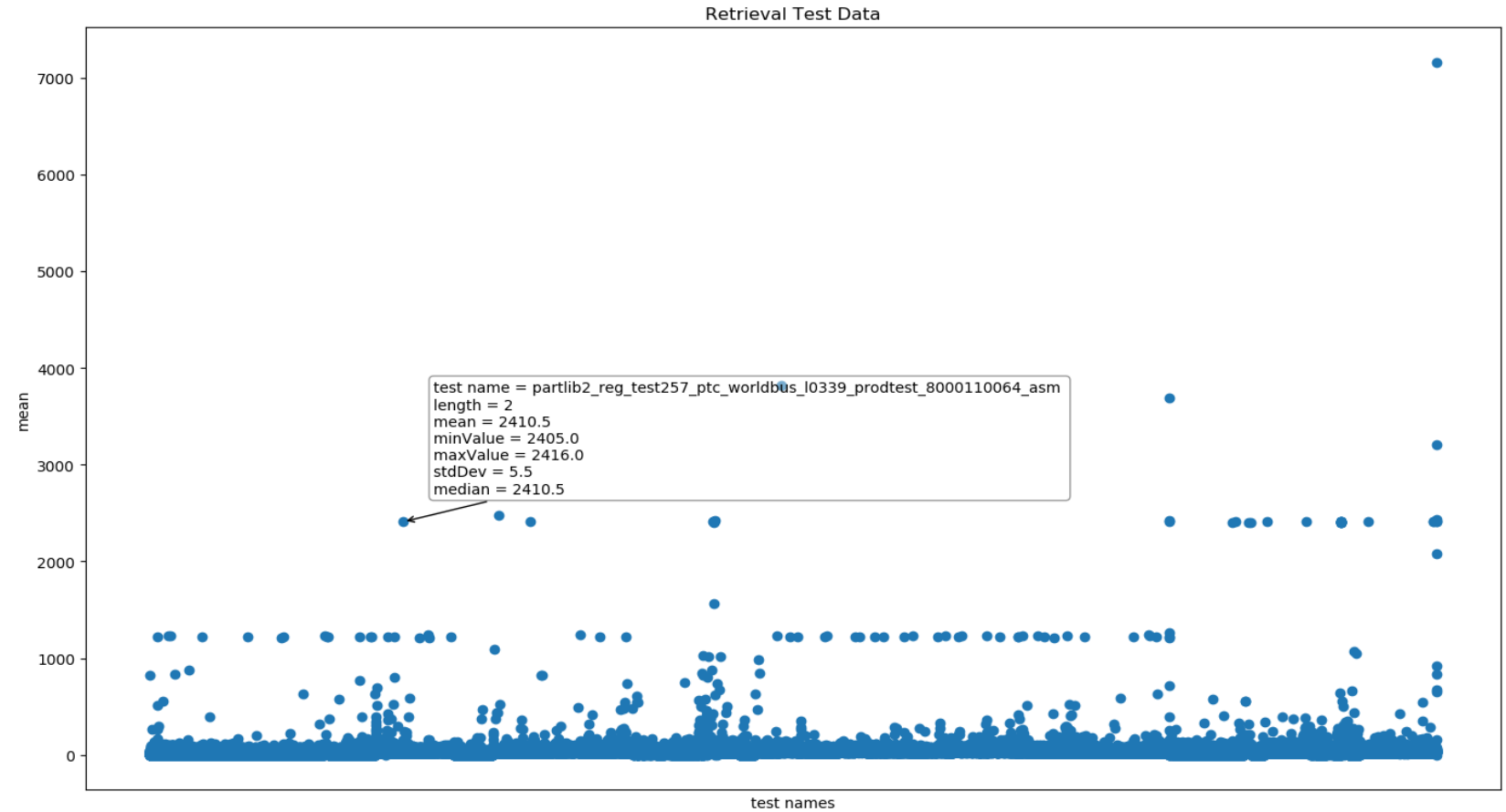
# UML Diagrams – Component





# Output – (124,383)

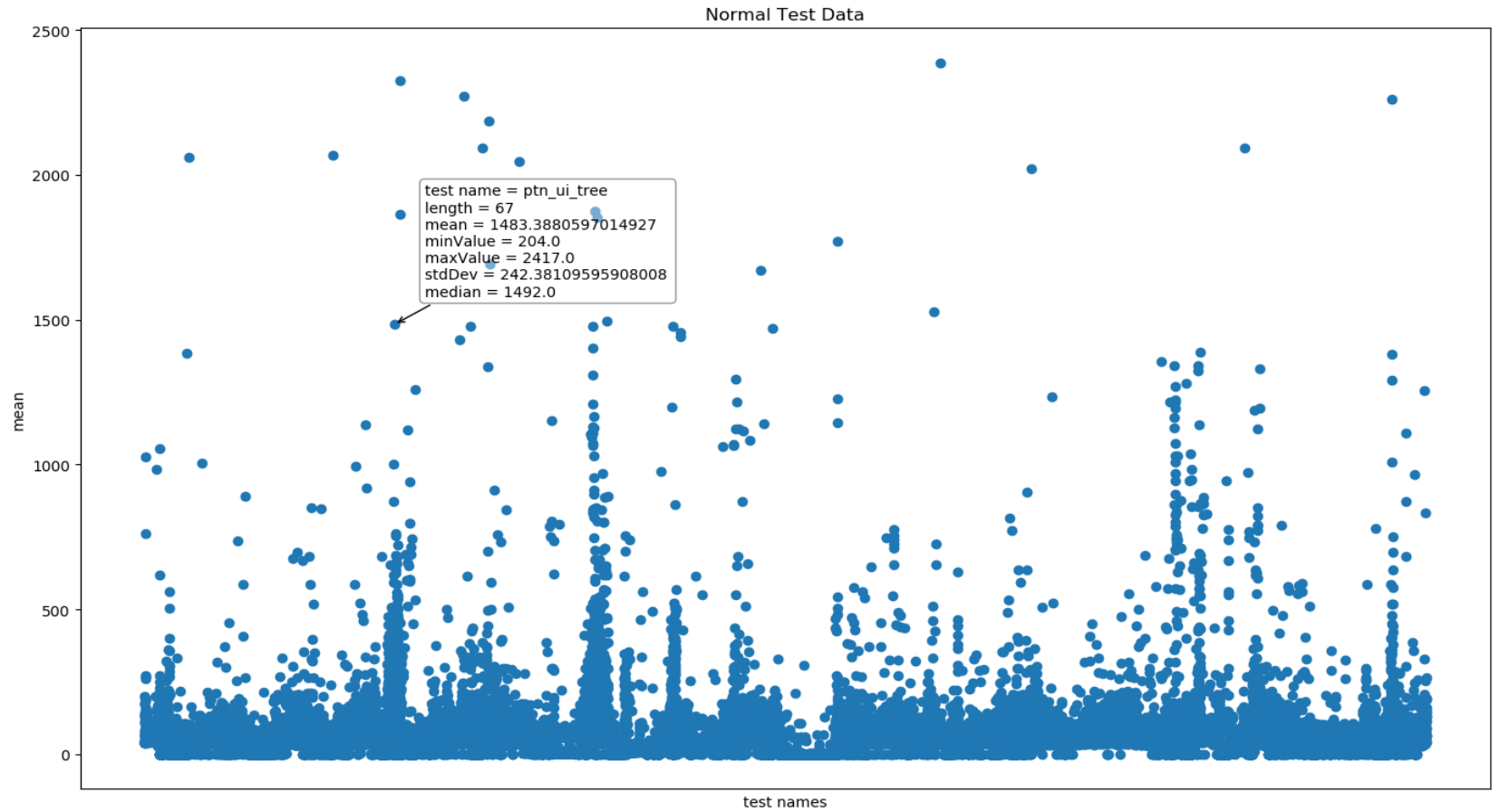
Figure 1





# Output – (48,295)

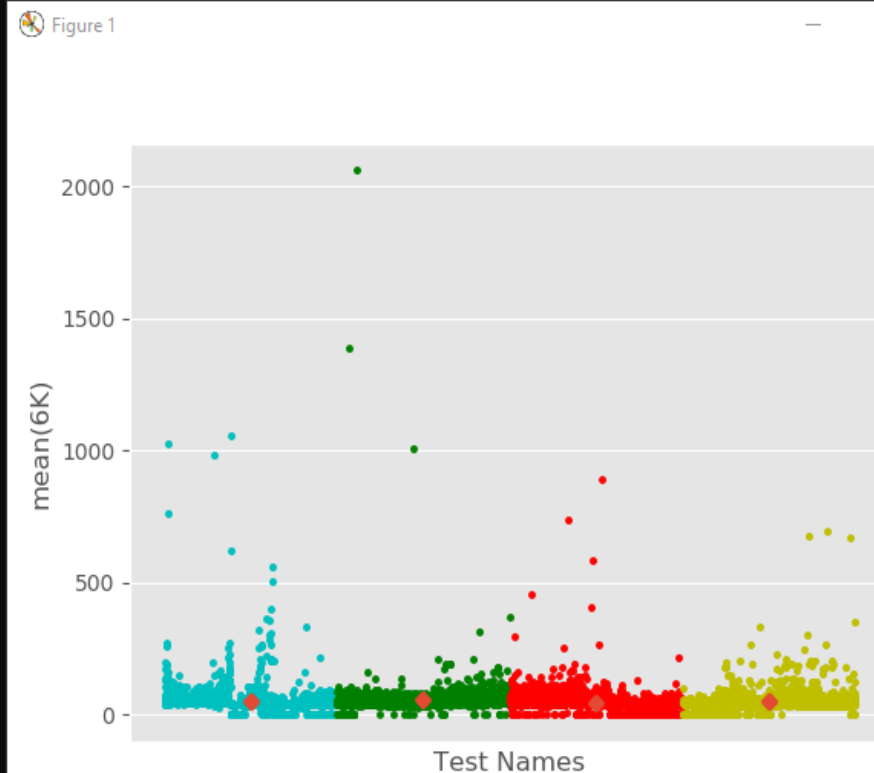
Figure 1



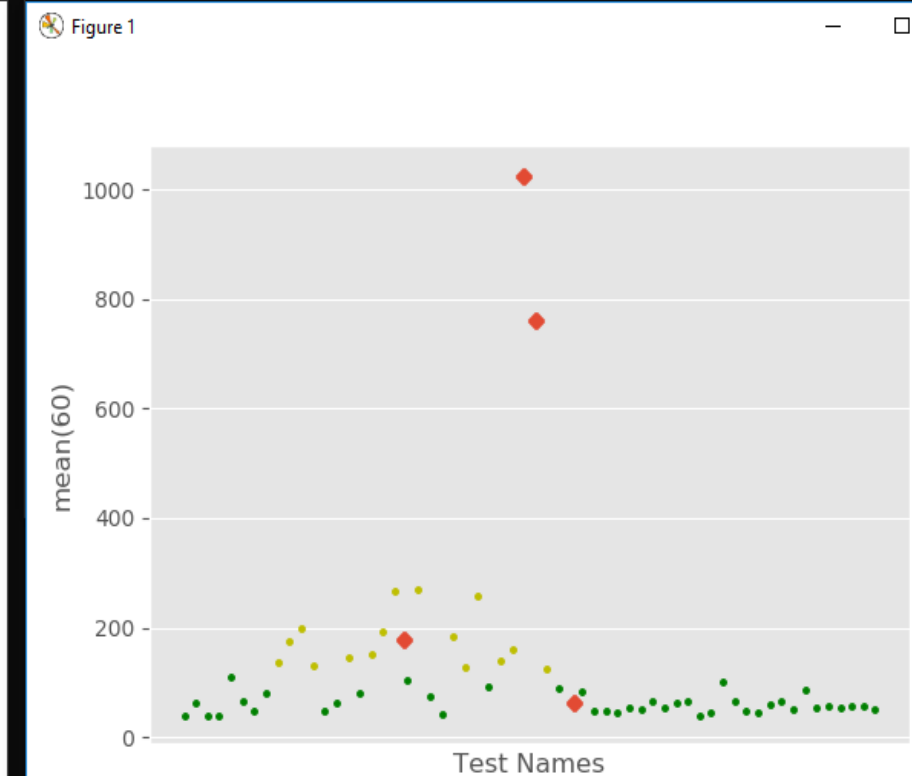


# Output – (48,295)

```
6000
stored all values in dictAllValues
centriod :
[[2247.      59.03391294]
 [3750.5    48.22614124]
 [5251.     52.39520902]
 [ 747.5    53.73861429]]
finised plotting
```



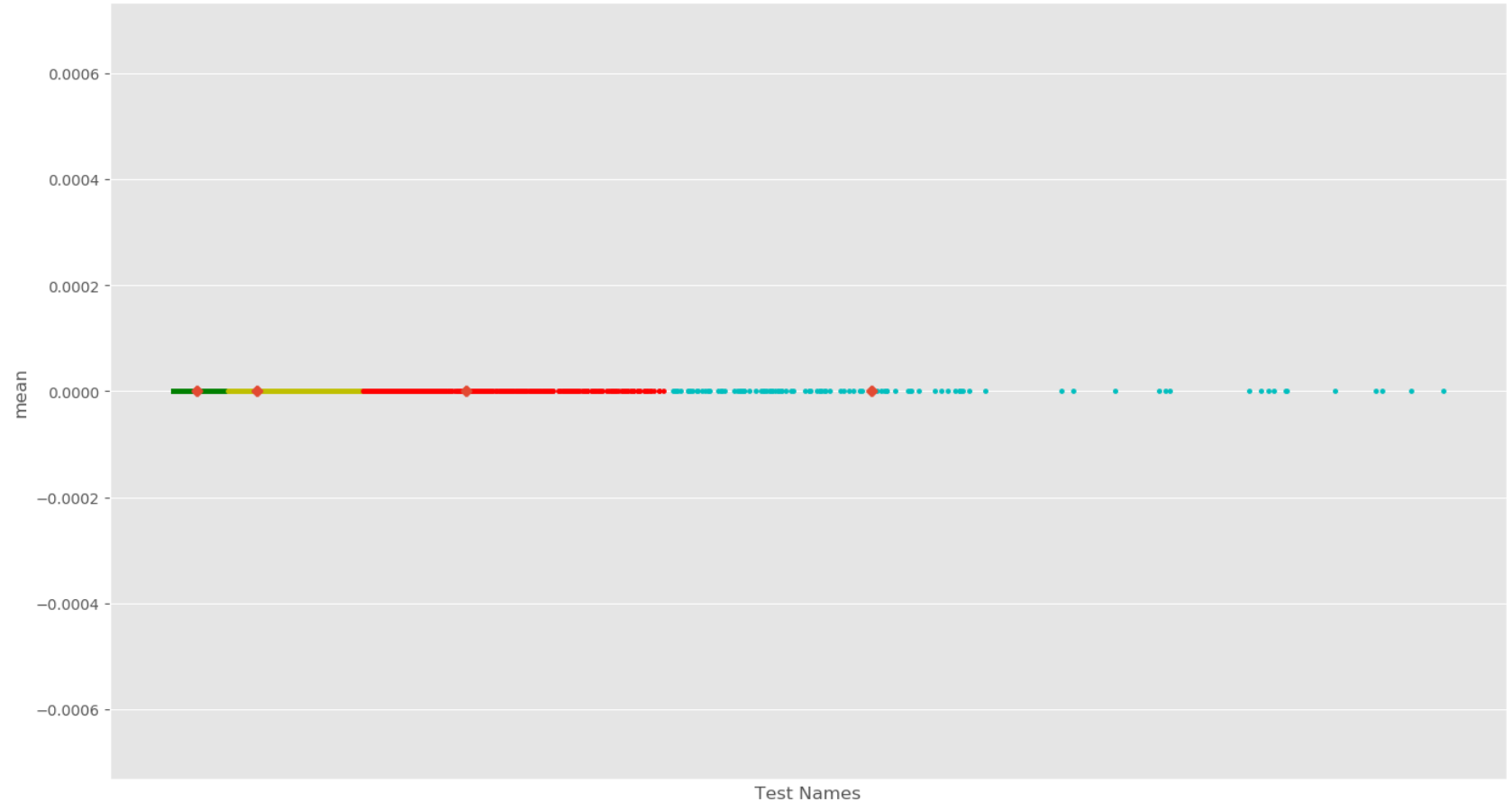
```
C:\WINDOWS\py.exe
60
stored all values in dictAllValues
centriod :
[[ 33.25581395  61.40518444]
 [ 29.         1025.14864865]
 [ 18.73333333  177.47710658]
 [ 30.         761.68831169]]
finised plotting
```



# Output – (48,295)



Figure 1





# Future Enhancements and References

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- Prediction of the test
- Daily, weekly, monthly and yearly report can be generated
- Python.com
- Youtube.com
- Scikit-learn.com
- Wikipedia.com
- Youtube.com/sentdex





# Where to get more info

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[github.com/gkalidas/Python/tree/master/MCS\\_project\\_sem\\_III](https://github.com/gkalidas/Python/tree/master/MCS_project_sem_III)



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# Thank You!