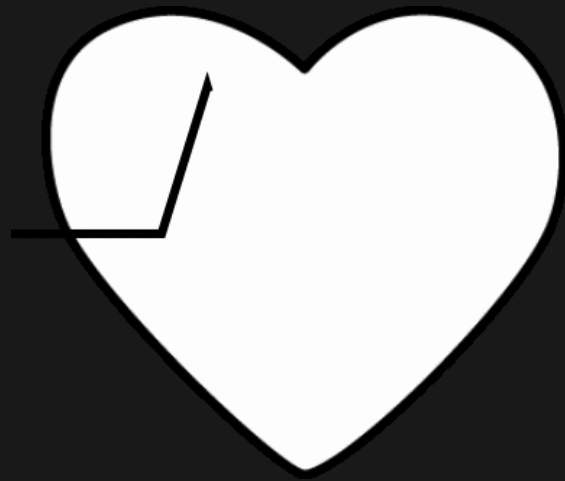




John



Exam Stress!!!!

Exam Stress Analysis

Python Pioneers - Team 8

Members :

Neenu Nair-Team Lead

Sridevi Basavaraju

Pallavi Reddy

Harshalatha Ponugumati

Prajakta Vaidya

Hackathon Journey

Collaboration



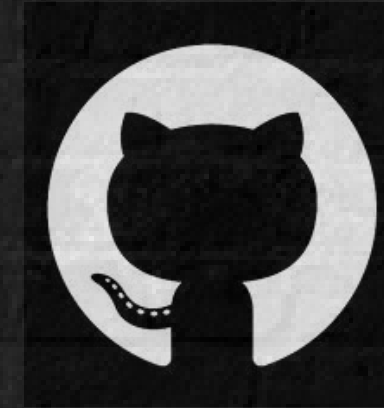
Daily Scrum Calls



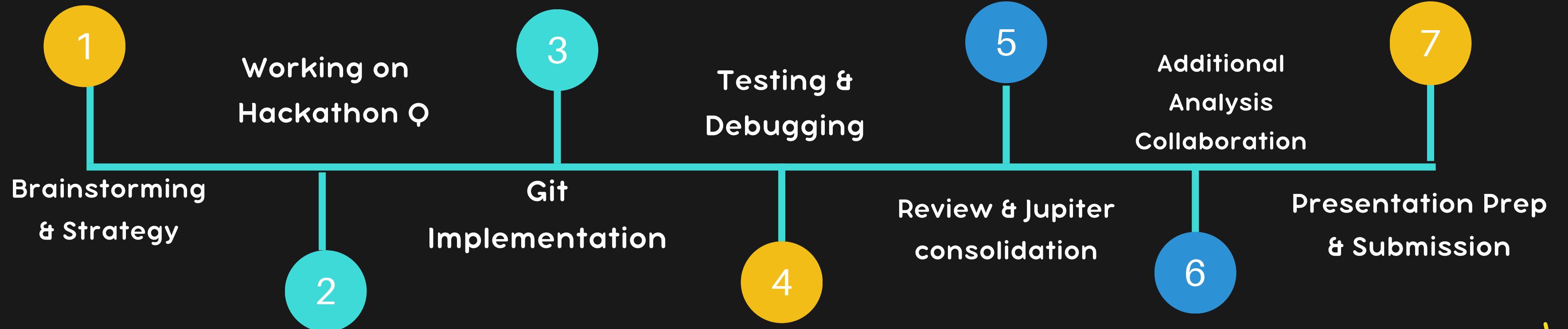
Analysis



Git Hub



Jupyter Notebook





Exam Stress Analysis

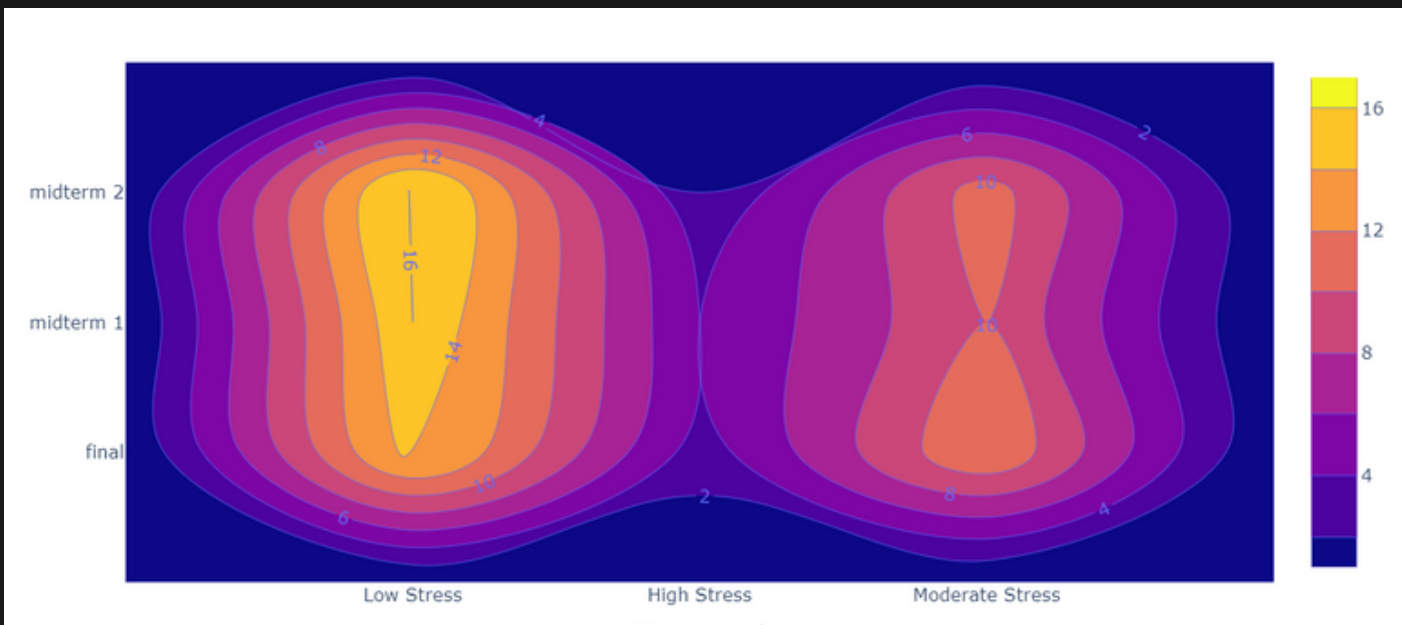
- Exploratory DataAnalysis
- **Tools:** Python ,PostgreSQL

pandas

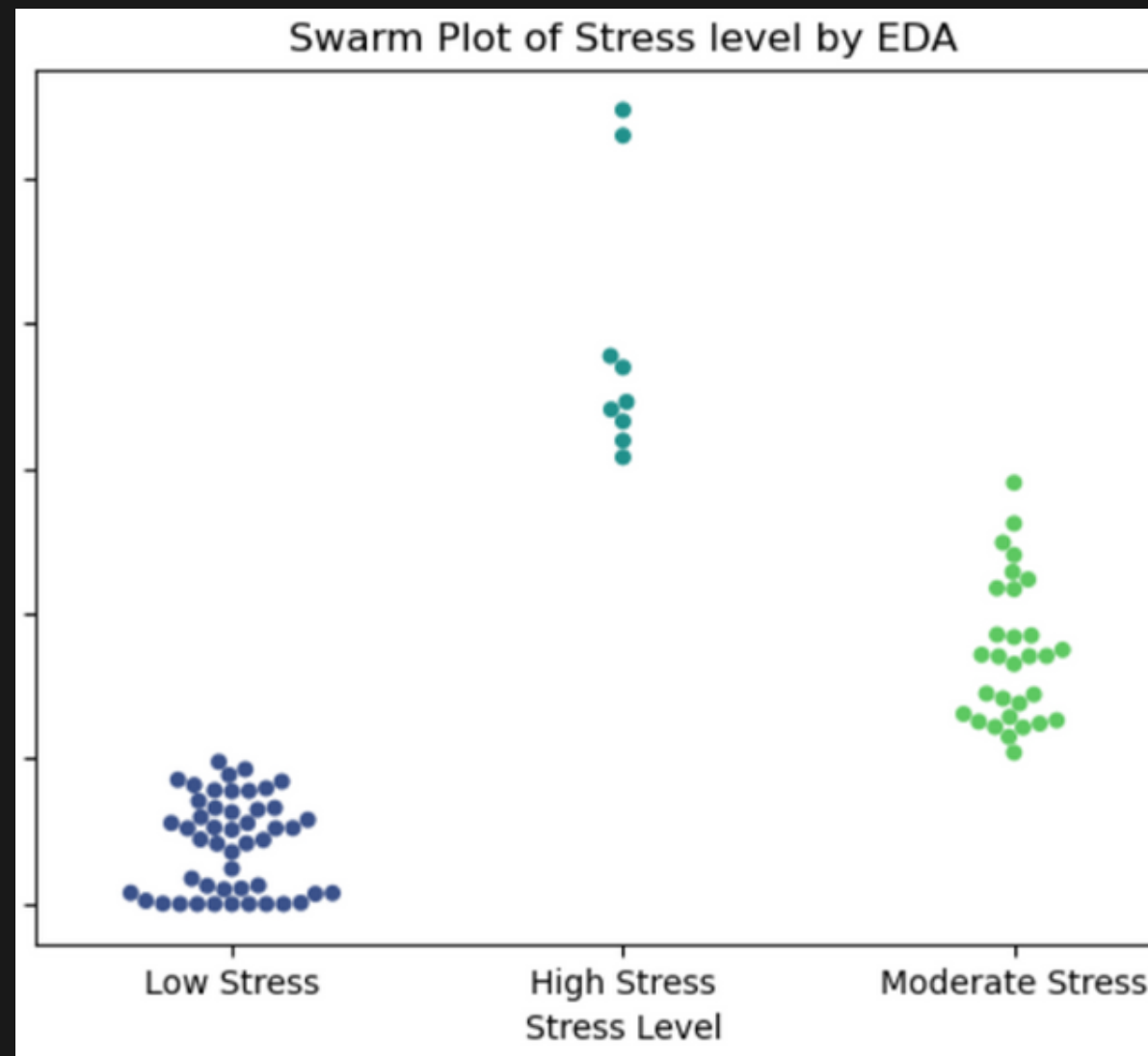
matplotlib

seaborn

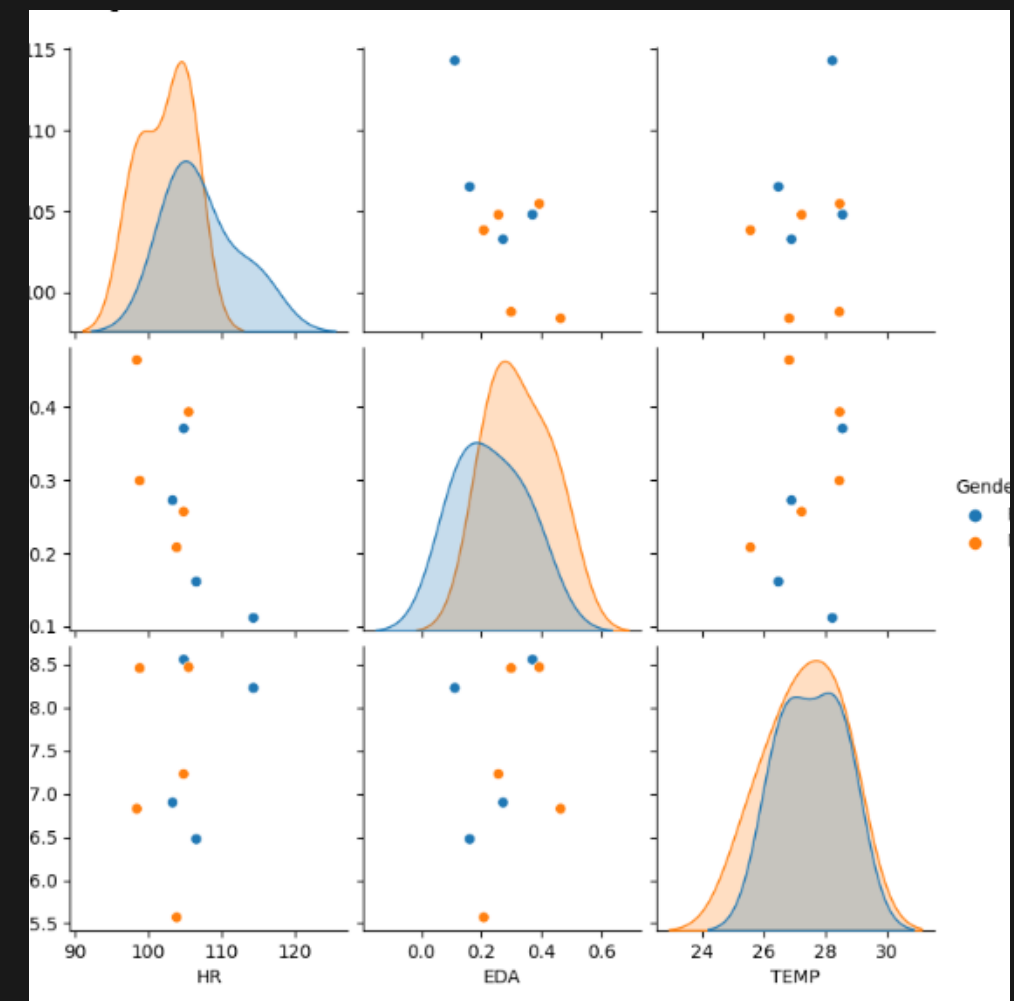
plotly



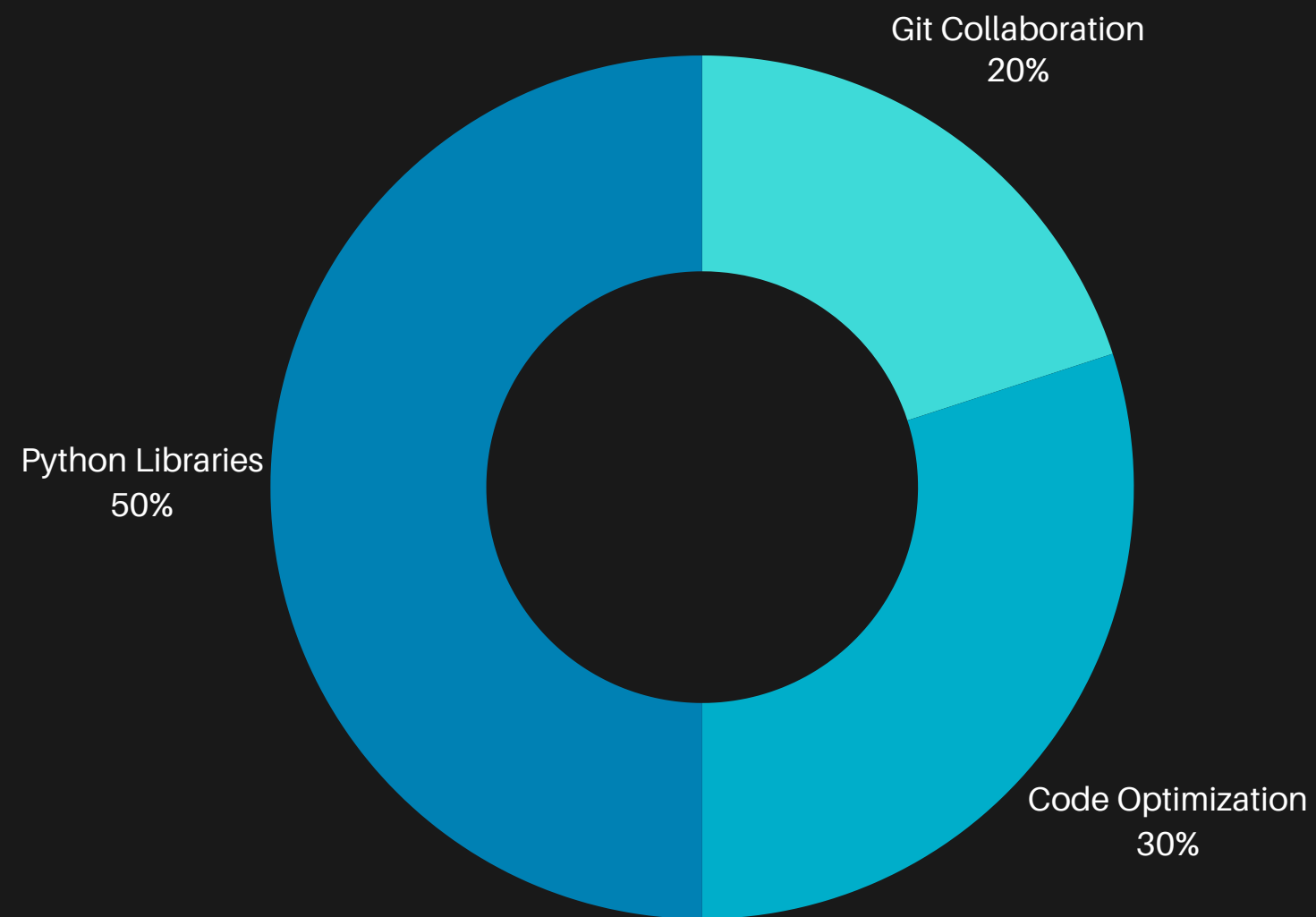
Density_contour



Swarm Plot

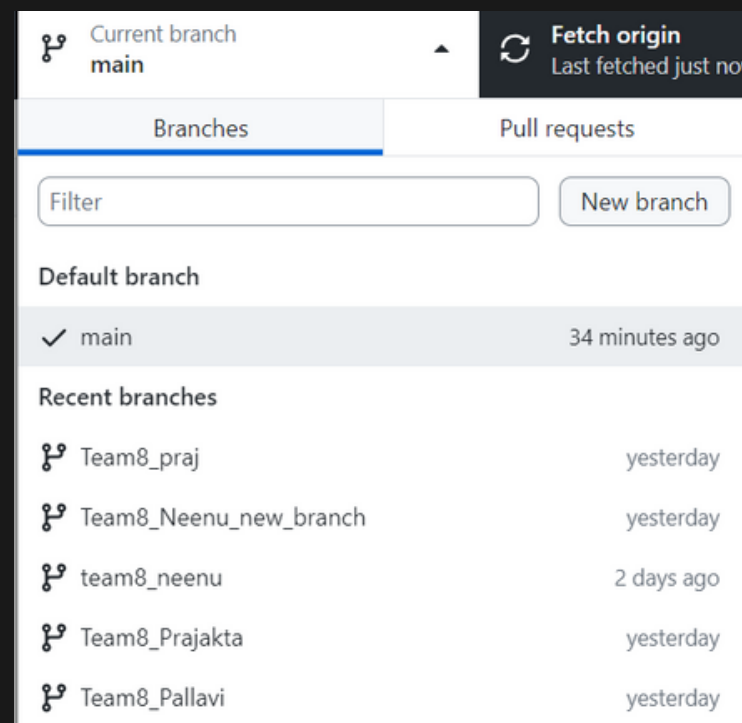


Pairplot



Challenges

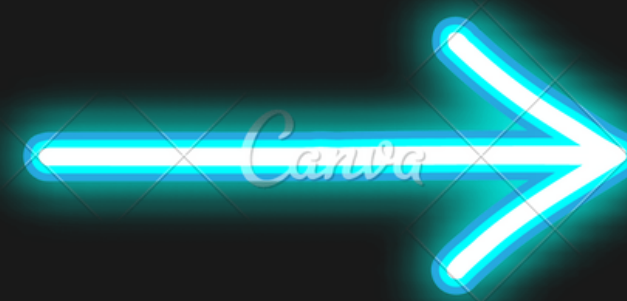
- Created Branches for Github Collaboration



Excluding merges, **5 authors** have pushed **90 commits** to main and **96 commits** to all branches. On main, **13 files** have changed and there have been **23,501 additions** and **2 deletions**.

- Using the mean interbeat interval per minute, calculate the Root Mean Square of successive differences for any 30 minute interval and add this to IBI

Created bins using `pd.cut()`



	bin(30 min Interval)	IBI
0	[0, 30)	0.483357
1	[30, 60)	0.599263
2	[60, 90)	0.636814
3	[90, 120)	0.648348
4	[120, 150)	0.652954
5	[150, 180)	0.600565
6	[180, 210)	0.634305
7	[210, 240)	0.512250

Optimization Techniques



1

Index Optimization



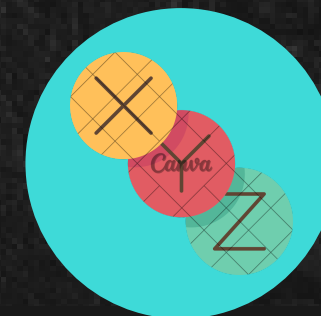
2

Memory
Optimization



3

Filter Optimization



4

Parallelism



5

Time optimization

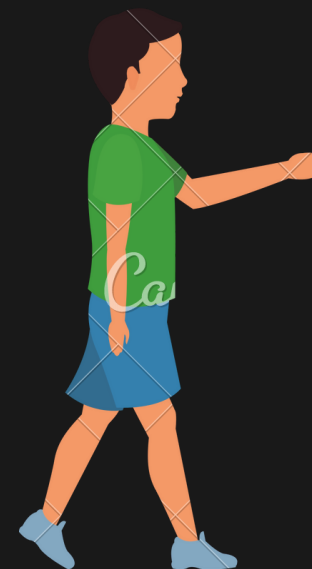
```
#Filtering data of Student S01 using query method
df_eda_S01=df_EDA.query("Student_id=='S01'")
df_hr_S01=df_HR.query("Student_id=='S01'")

#Merging the filtered data
df_eda_hr=pd.merge(df_eda_S01,df_hr_S01, on=['Student_id','Time in mins','Exam'], how='outer')
eda_01=df_eda_hr[['Student_id','Time in mins','Exam','EDA','HR']]

df_temp_S01=df_Temp.query("Student_id=='S01'")
df_ibi_S01=df_IBI.query("Student_id=='S01'")
df_temp_ibi=pd.merge(df_temp_S01,df_ibi_S01,on=['Student_id','Time in mins','Exam'],how='outer')
df_temp_ibi=df_temp_ibi[['Student_id','Time in mins','Exam','TEMP','IBI']]
```



Stretch



Take a short walk



Exercise regularly



THANK YOU