# Capstone Project Weekly Progress Report

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| **Project Title** | Big_Mart Data Visualization and Analysis |
| **Group Name** | Group D |
| **Student names/Student IDs** | Avik Kundal(744823), Jasmeet Kaur(744215), Kirandeep Kaur(742276), Savreet Kaur(742785), Sukhjinder Singh(743143) |
| **Reporting Week** | 14 oct 2019 to 20 oct 2019 |
| **Faculty Supervisor** | William Pourmajidi |

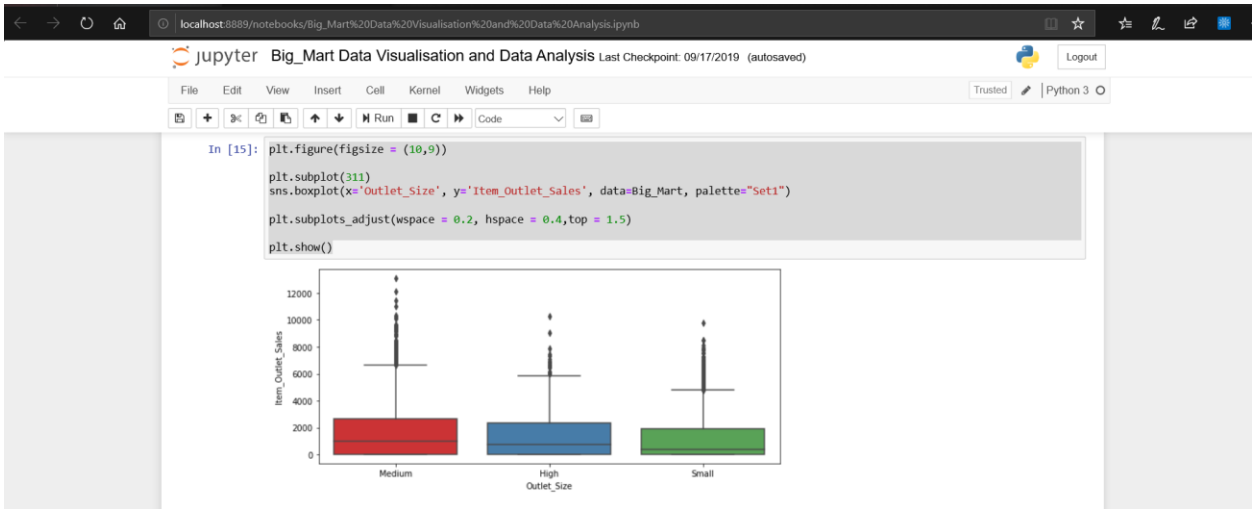
1. **Tasks Outlined in Previous Weekly Progress Report** (Provide detailed information on the tasks to be completed in this week)

**To work with seaborn library to get the boxplots between different features.**

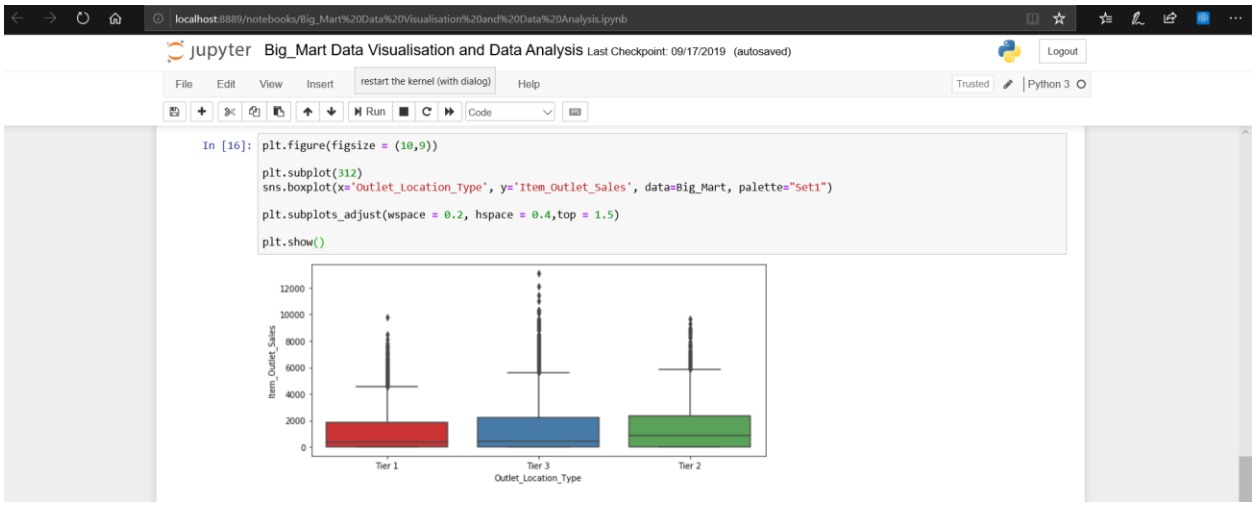
2. **Progress Made in Reporting Week** (Provide detailed information on the progress that you made in the reporting week. Limit your write-up to no more than two page)

**The main objective of this week was to :**

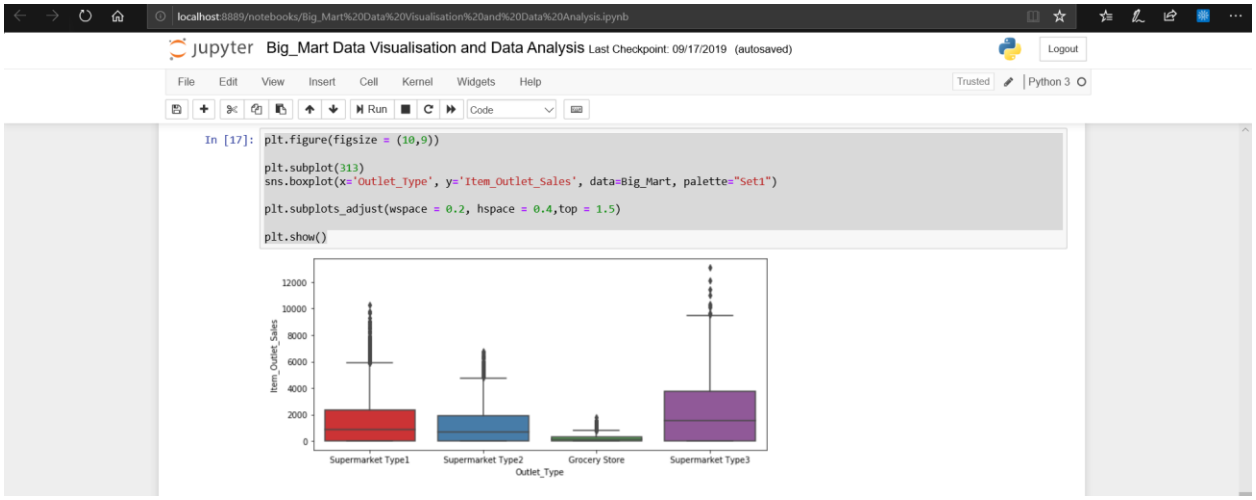
- **Find the hidden relationship between Item_outlet_sales and Outlet_size using boxplot.The decreasing order of sales in following graph are medium>high>small.**



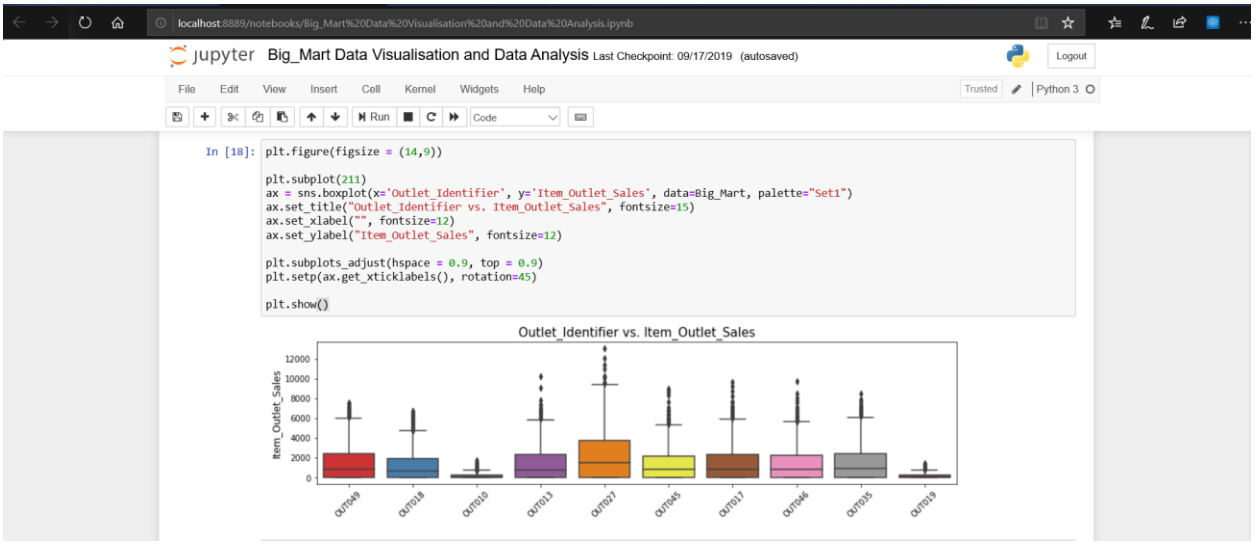

- **The decreasing order of sales in following boxplot between Item_Outlet_sales and Outlet_location_type is Tier3>Tier2>Tier1**



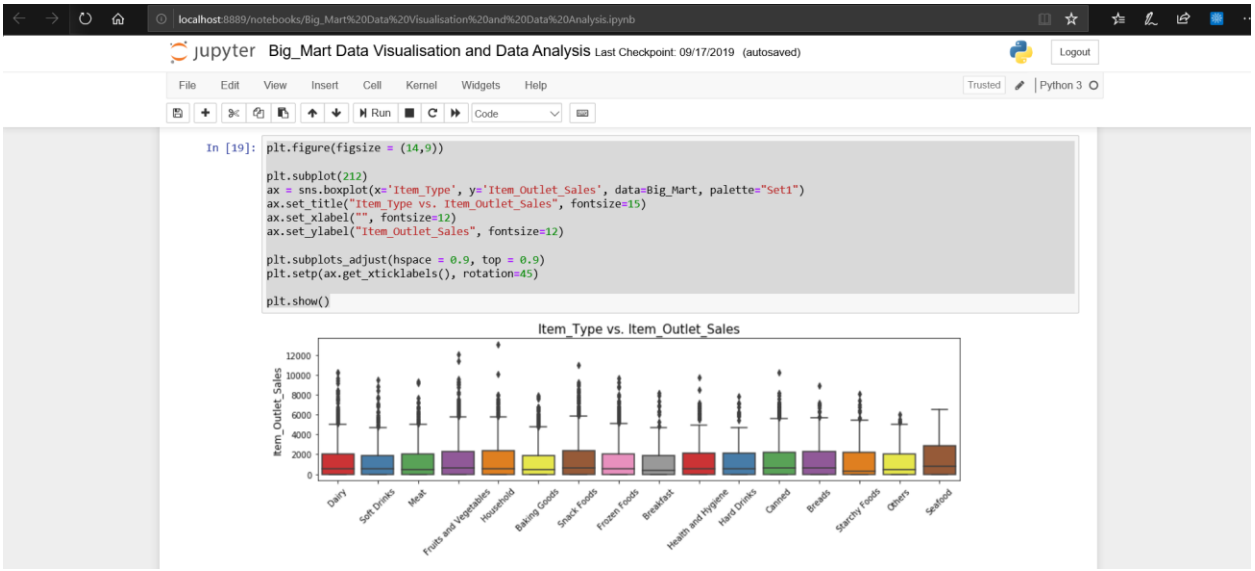

- **The Boxplot between Item_outlet_sales and Outlet_type is that Supermarket Type 3 has highest number of sales followed by Supermarket type 1 followed by Supermarket type 2 then comes the Grocery stores.**




- **The following boxplot between outlet_identifier and item_oulet_sales reveals that Out027 has highest number of outlet sales followed by out049 ,out046 ,out035,out017 ,0utlet045 with almost similar number of sales thereafter comes the out018 and out010 and out019 with least number of sales in our boxplot.**




- **The following box plot shows the hidden relationship between item_type and outlet_sales .**




3. **Difficulties Encountered in Reporting Week** (Provide detailed information on the difficulties and issues that you encountered in the reporting week. Limit your write-up to no more than one page)

**We encountered difficulty in adjusting size of boxplot with commands plt.subplots_adjust(hspace = 0.9, top = 0.9)**

**plt.setp(ax.get_xticklabels(), rotation=45)**

4. **Tasks to Be Completed in Next Week** (Outline the tasks to be completed in the following week)
   **To work on more hidden relationships between the features and to work on imputing mean in null values of column Outlet_Size.**