# CUSTOMER SEGMENTATION

CLUSTERING ANALYSIS OF CUSTOMER SEGMENTS

- Objective: To identify distinct customer segments based on age, annual income, and spending score.

- Method: Utilized K-Means clustering to segment the customer base

ANALYSIS INSIGHTS

Target Cluster

- Target group should be cluster 0 which has a high spending score and high income.

- 54 percent of cluster 0 shoppers are female compared to male which make up 46 percent . We should look for away to attract these customers using a marketing campaign targeting popular times in this cluster.

- Cluster 1 represents an interesting opportunity to market to customers through events on popular items.

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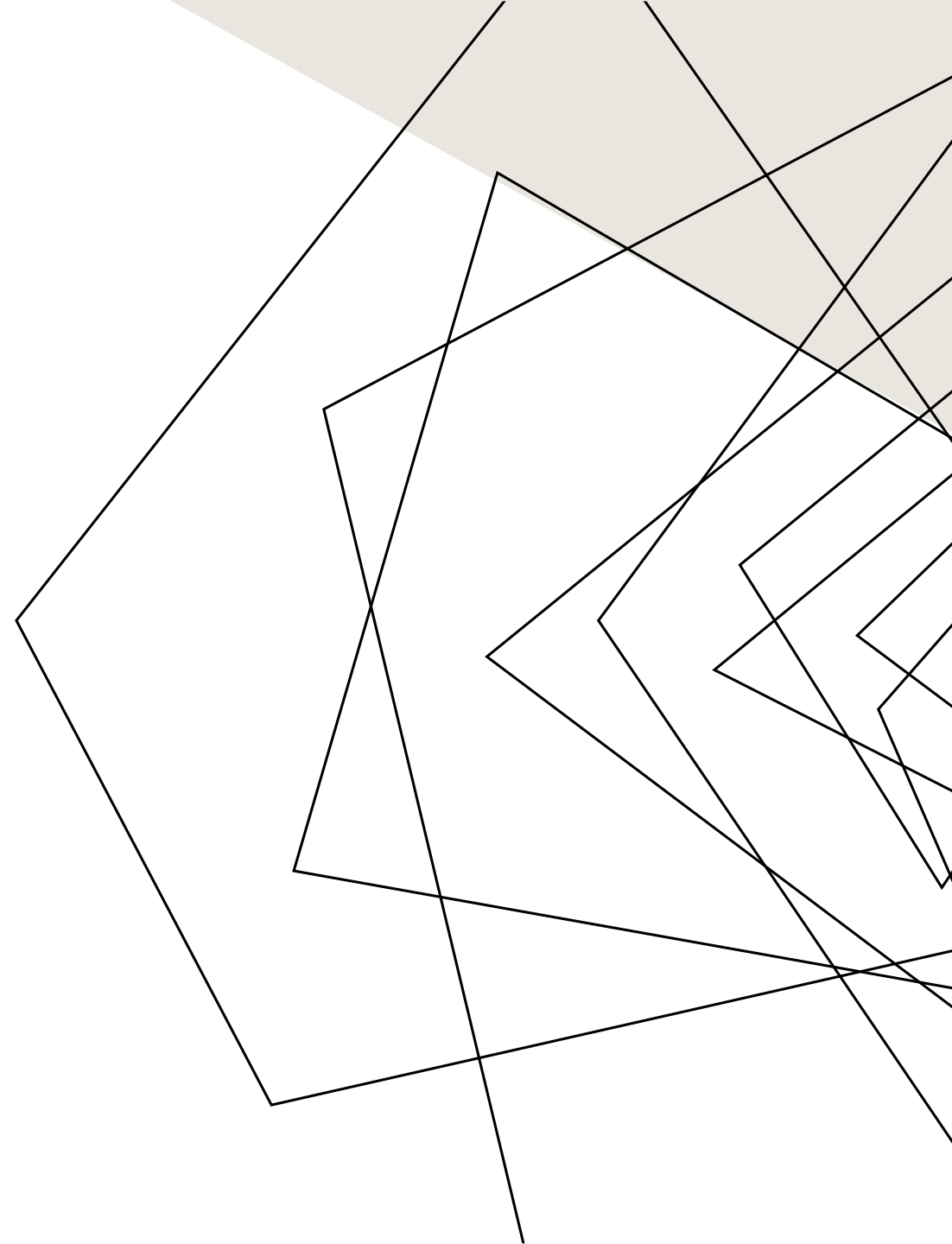
CLUSTER 0: YOUNG HIGH EARNERS, HIGH SPENDERS

Annual Income vs Spending Score by Cluster
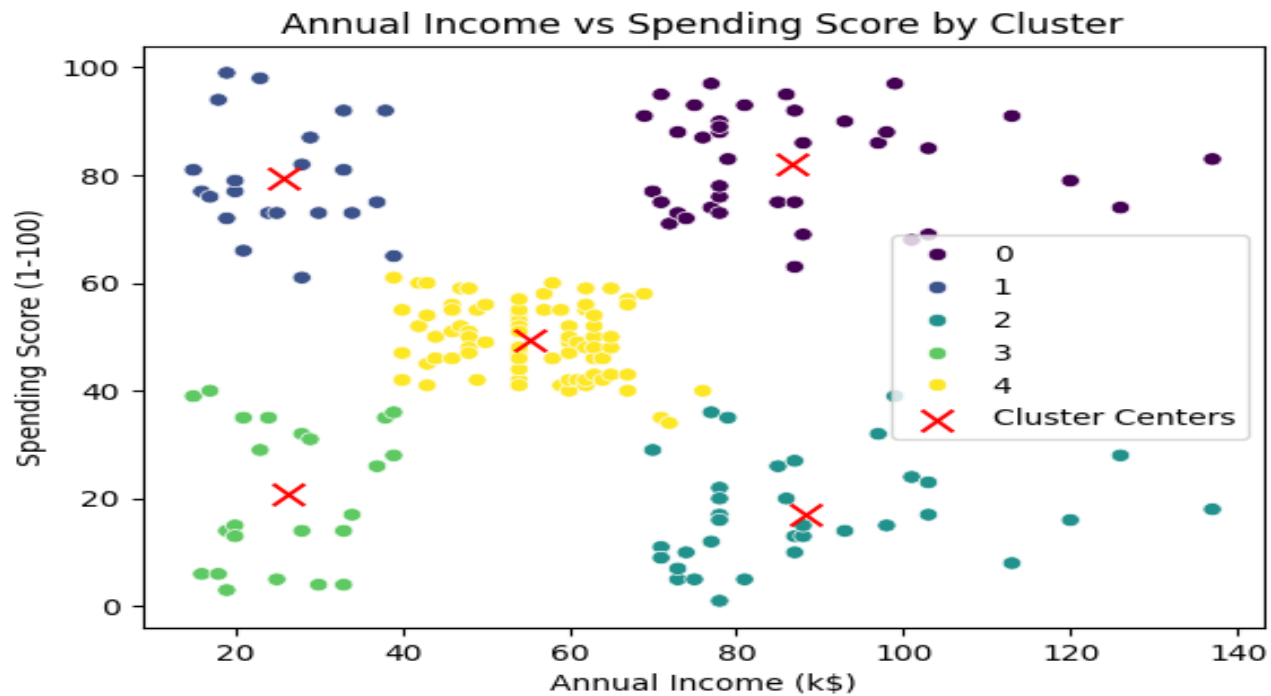
BIVARIATE CLUSTERING TABLE

Cluster 0 represents the ideal target: young individuals with high income and a high spending score. Stores could benefit by promoting more premium and luxury products to this group to increase revenue.

Cluster 1 is the next ideal target, consisting of young individuals with lower income but a high spending score. Stores could benefit by targeting sales to this group to boost revenue. For example, seasonal sales or promoting products that have been on the shelf too long would be a great way to increase revenue and attract individuals in Cluster 1.

Custer	Average Age	Average Annual Income (k$)	Average Spending Score (1-100)
0	32.69	86.54	82.13
1	25.27	25.73	79.36
2	41.11	88.2	17.11
3	45.22	26.3	20.91
4	42.72	55.3	49.52

CLUSTER 2- HIGH INCOME AND LOW SPENDING SCORE

Strategy:

- Focus on Value and Quality: These customers may prioritize savings and value over frequent spending. Highlight the long-term value, durability, and quality of products. For example, promoting warranties, guarantees, or products that offer long-term savings could resonate well with this group.

- Personalized Offers: Consider personalized marketing that emphasizes savings, discounts on high-quality goods, or loyalty rewards for consistent but less frequent spending.

MIDDLE-AGED MODERATE EARNERS, AVERAGE SPENDERS

Strategy:

- Balanced Product Range: Offer a mix of mid-range products that balance quality and price. This group is likely to appreciate value without compromising too much on quality.

- Bundling and Family Offers: Consider bundling products or offering family-oriented deals, as this cluster might be making purchasing decisions for households.

- Loyalty Programs: Implement loyalty programs that offer rewards for consistent spending, encouraging them to stay within the brand.

SUMMARY: ADVANTAGES OF CUSTOMER SEGMENTATION

- Using customer segmentation allows us to tailor marketing strategies, optimize product offerings, and enhance customer experiences. By understanding the unique needs and behaviors of our different customer groups, stores can drive targeted promotions, improve customer satisfaction, and ultimately increase revenue. Segmentation ensures that resources are allocated effectively, making marketing efforts more impactful and efficient.
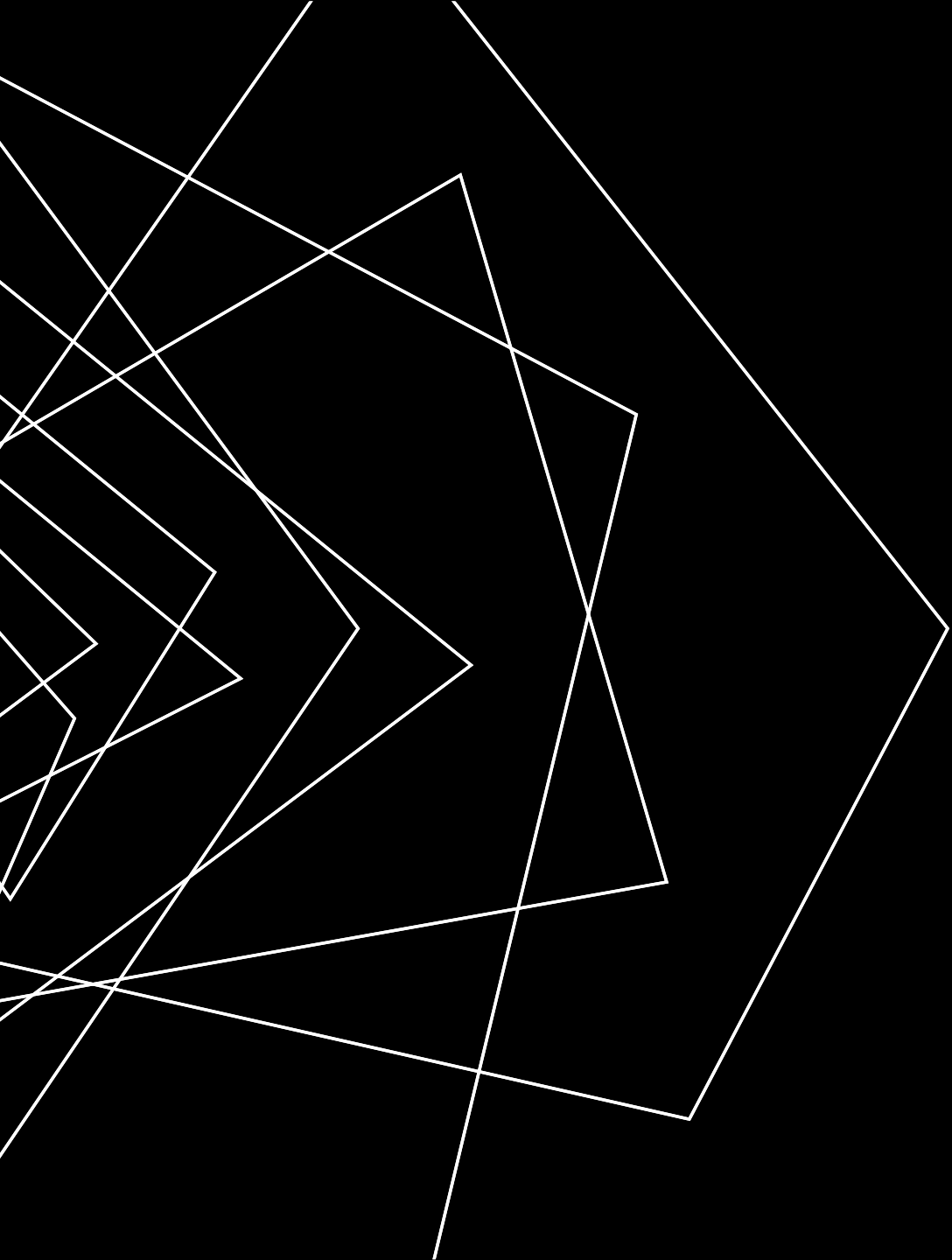
THANK YOU

CLUSTER CHARACTERISTICS

Top left: Represents individuals with lower annual income but higher spending scores.

Bottom left: Represents individuals with lower annual income and lower spending scores.

Middle: Represents a mix of individuals with moderate income and various spending scores.

Right side: Individuals with higher annual income are grouped separately based on their spending scores.
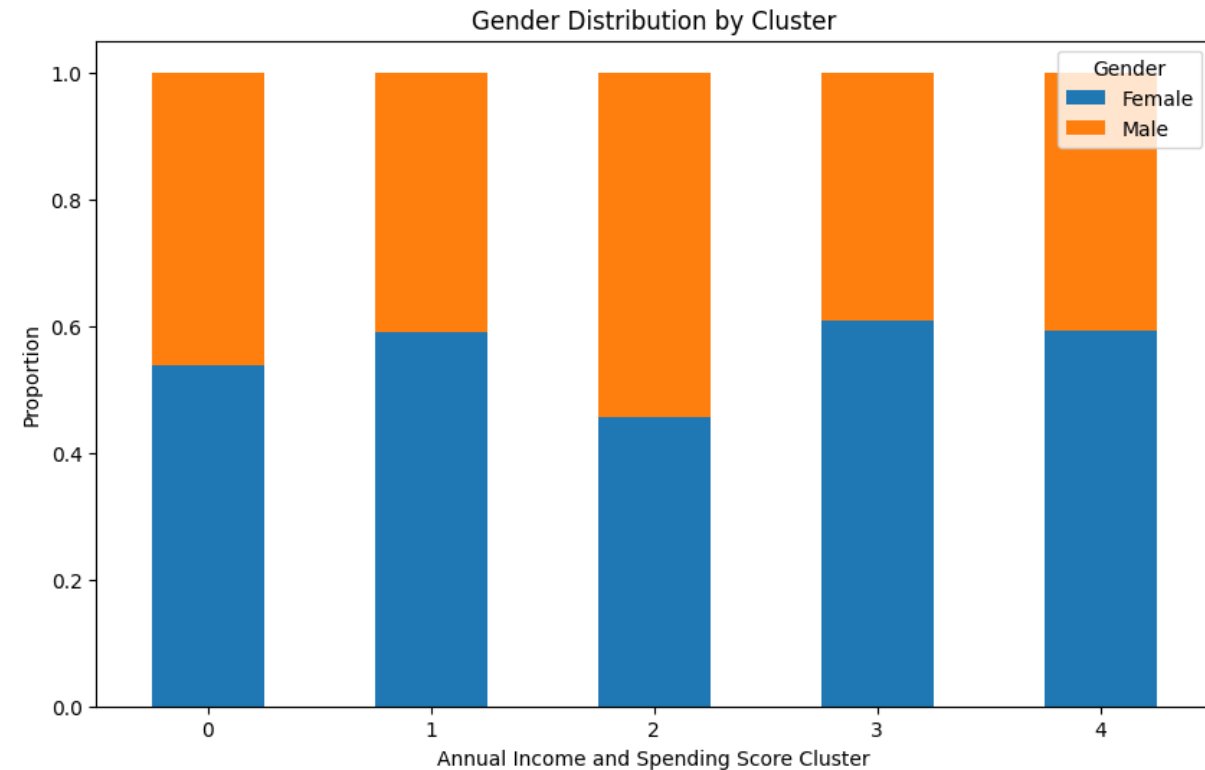

Annual Income vs Spending Score by Cluster
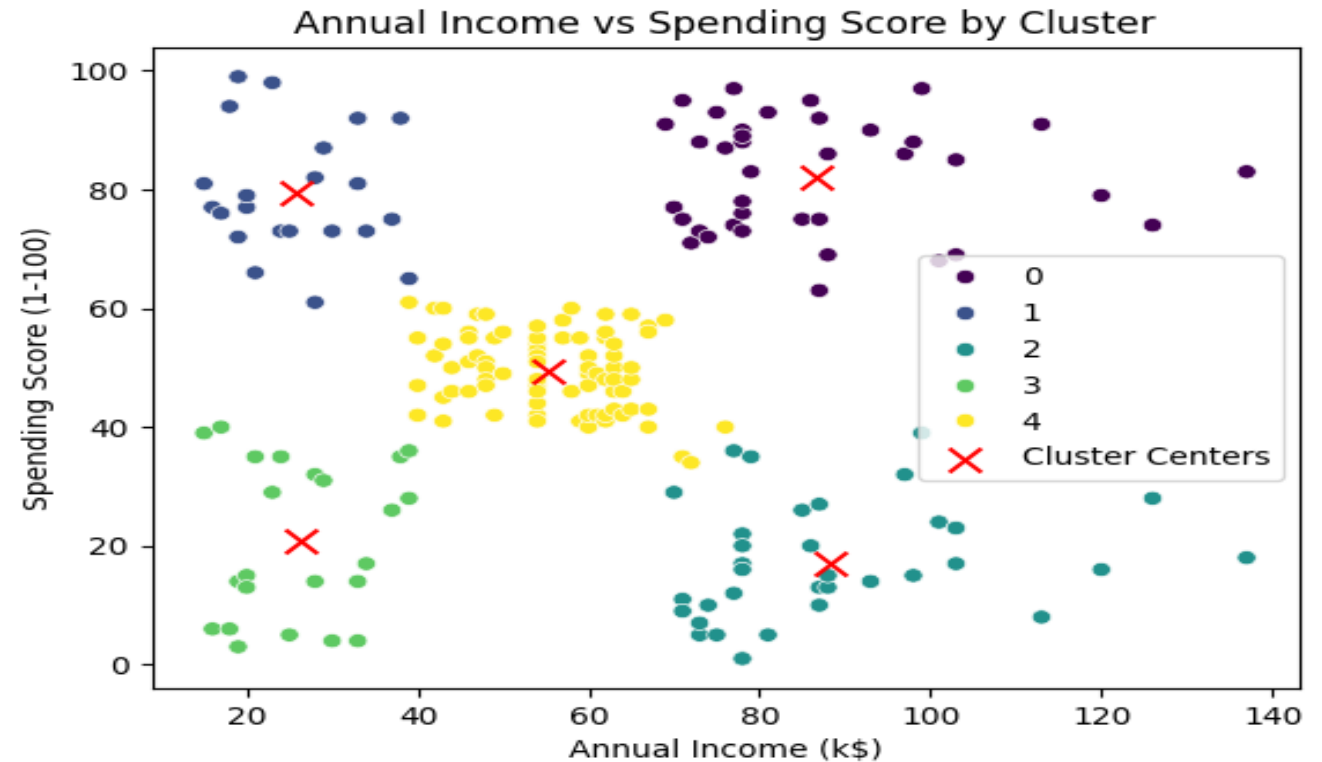
CLUSTER SUMMARY

Clusters 1, 3, and 4 have a higher proportion of females compared to males, with over 59% representation in each.

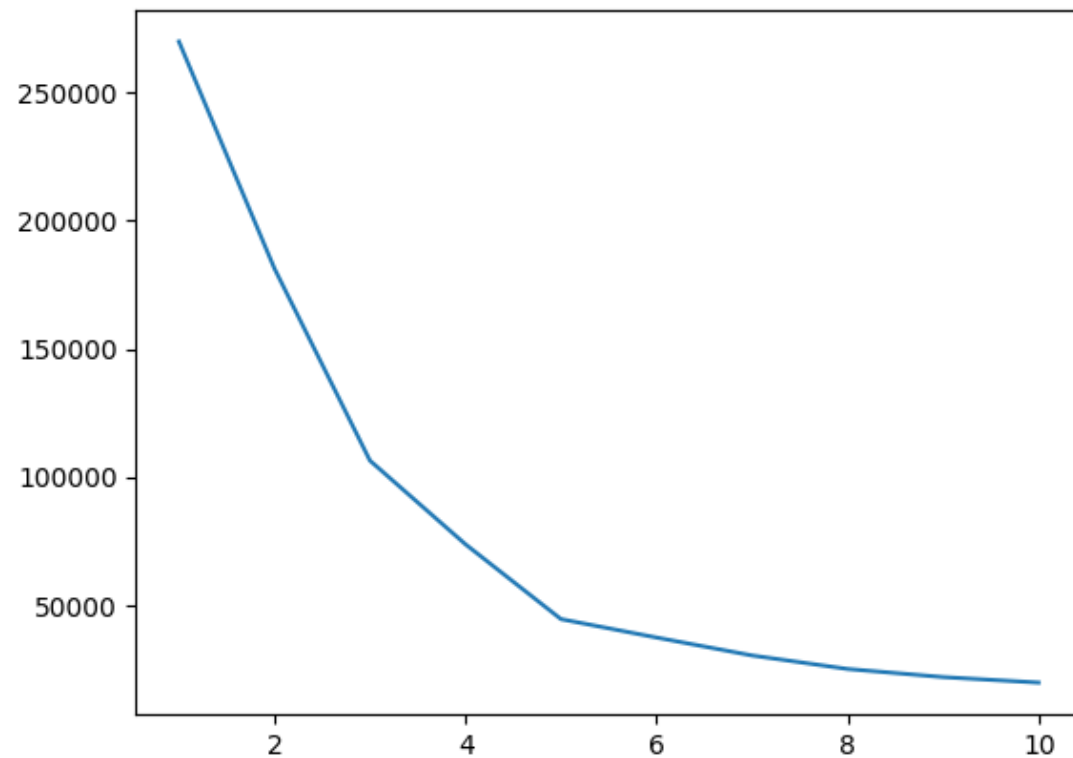Cluster 2 is the only cluster where males outnumber females, with 54.3% of the cluster being male.
bold text
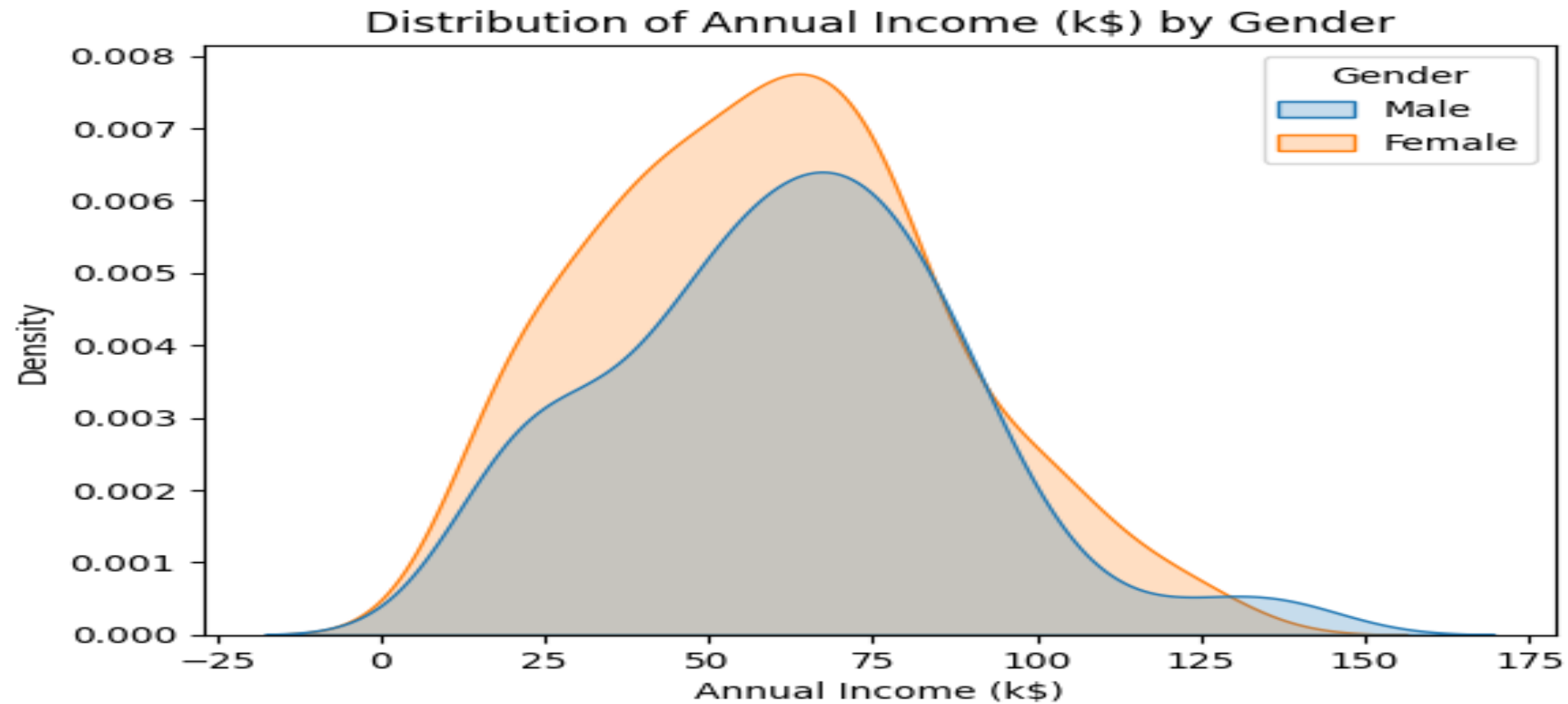Cluster 0 shows a more balanced gender distribution, with a slight majority of females.
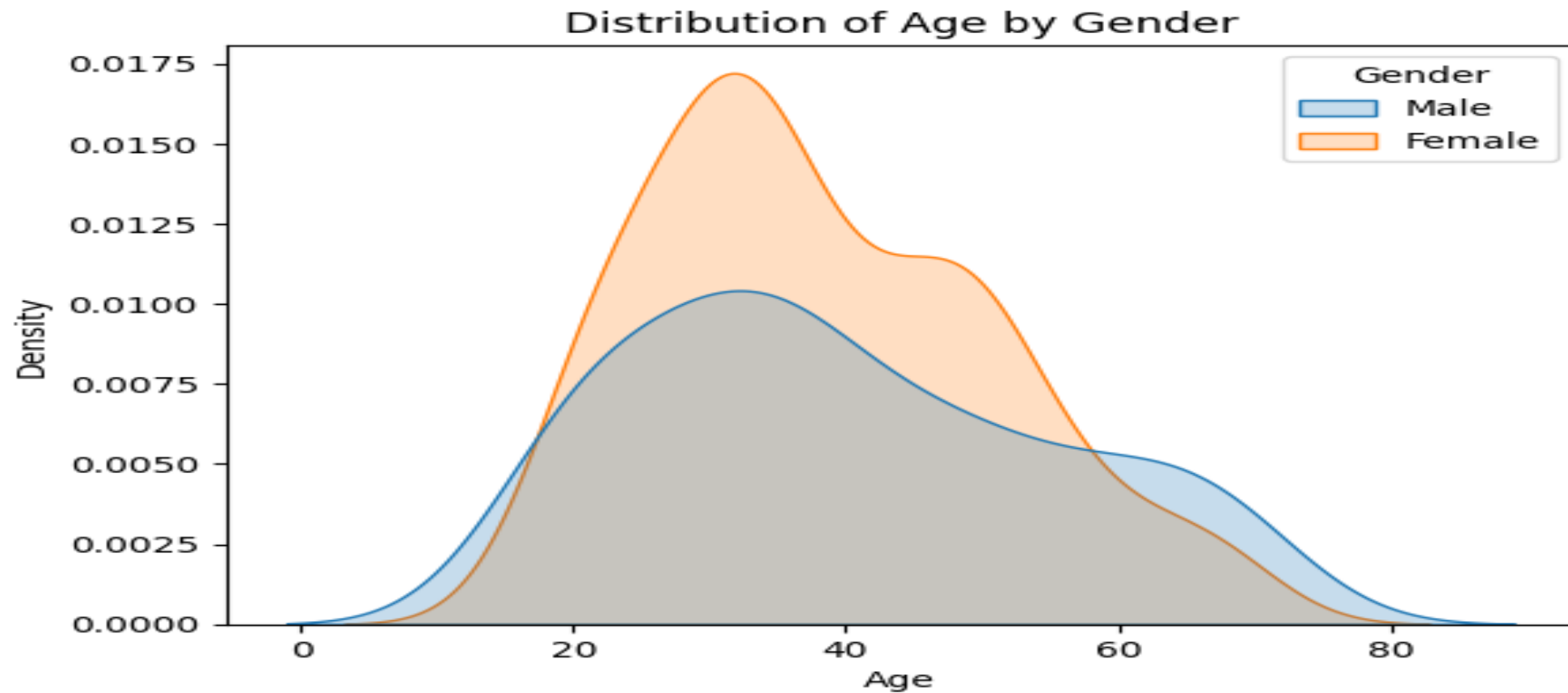

Gender Distribution by Cluster

BIVARIATE INTERTIA_SCORES2

The clustering number used
recommends 4-5 base off intertia/
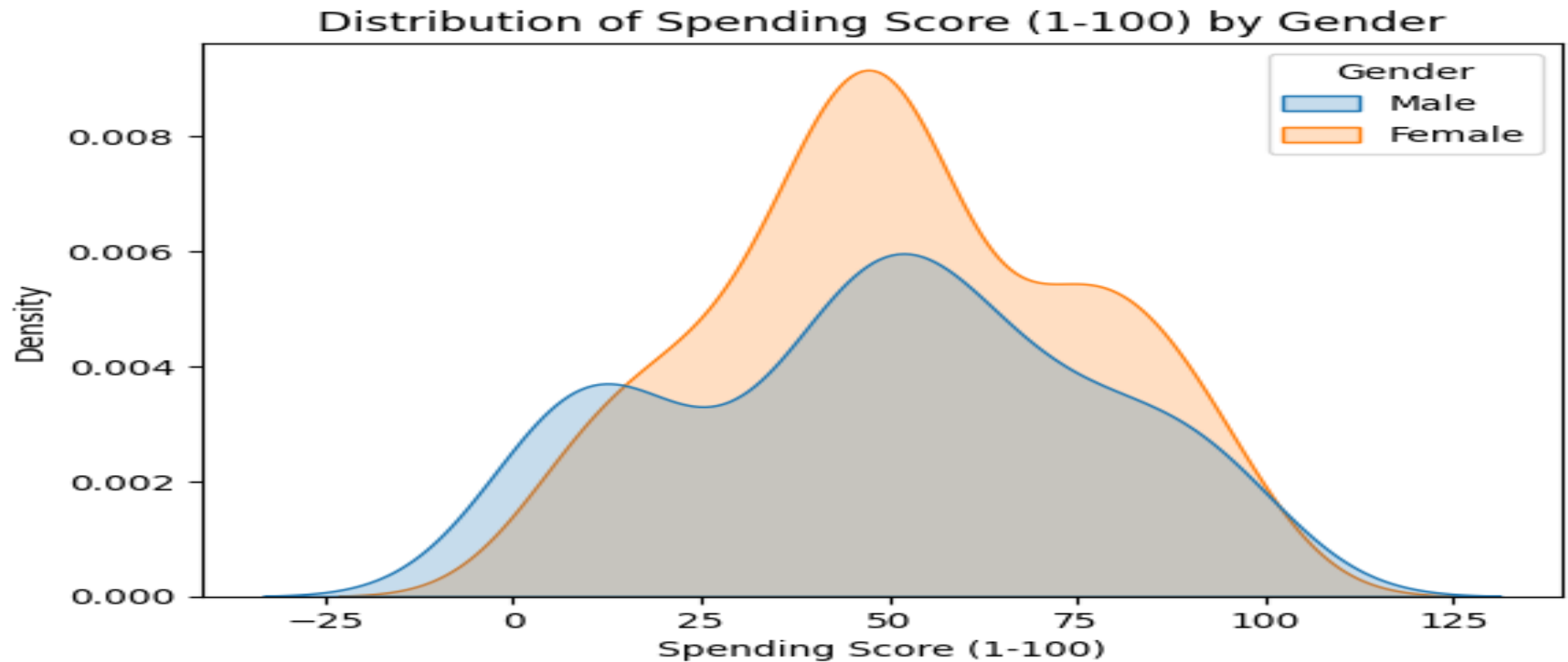albow

DISTRIBUTION OF ANNUAL INCOME BY GENDER

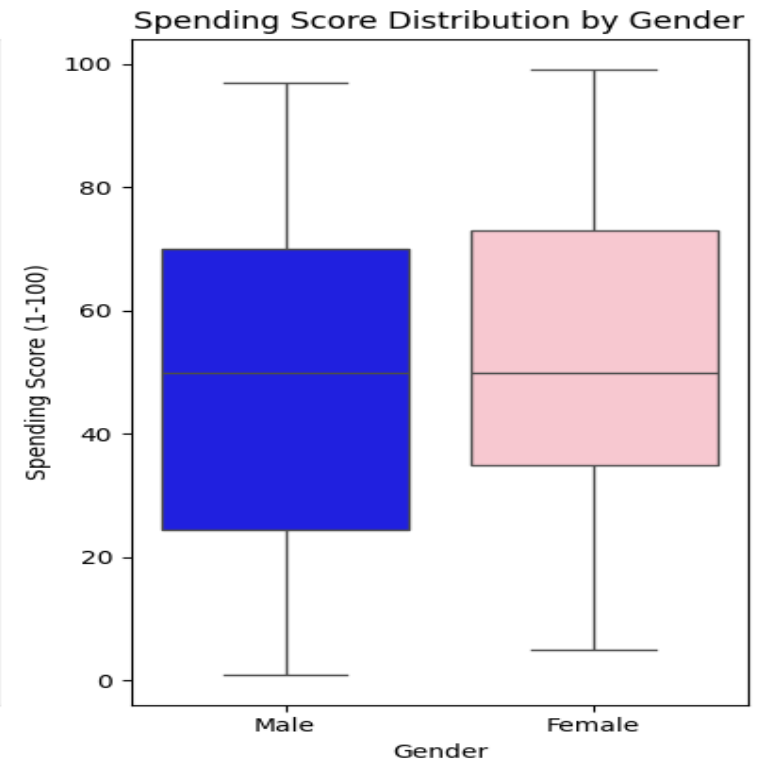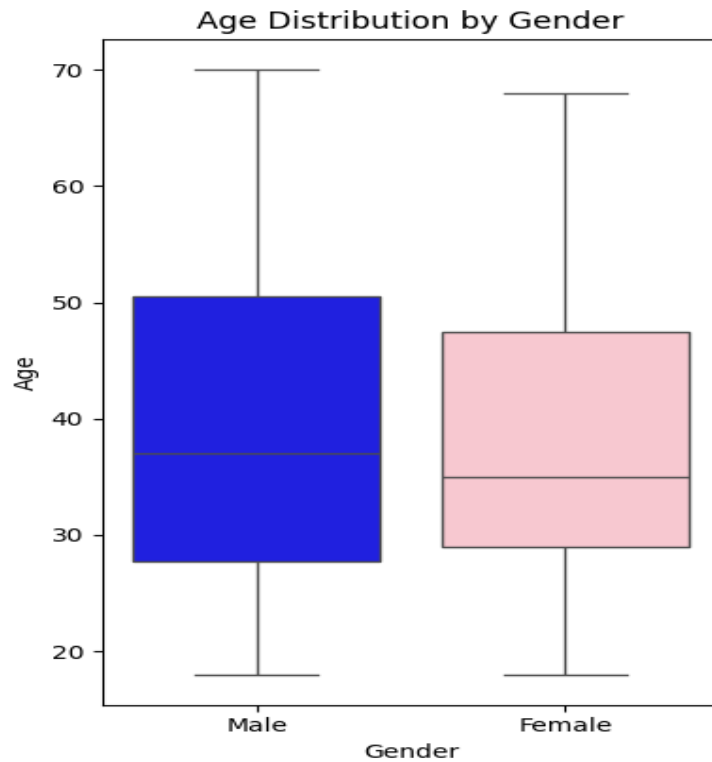Distribution of Annual Income (k$) by Gender

DISTRIBUTION OF AGE BY GENDER

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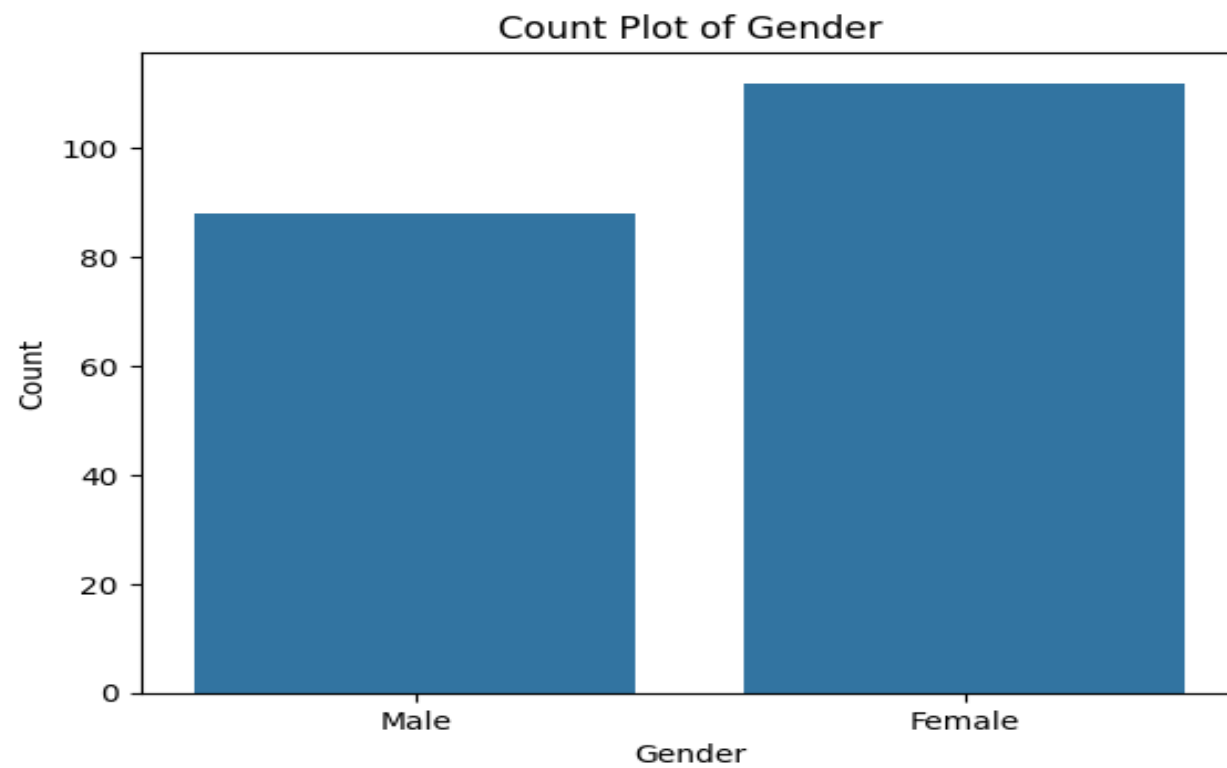# DISTRIBUTION OF SPENDING SCORE BY GENDER

DISTRIBUTION OBSERVED BY BOXPLOT

COUNT PLOT BY GENDER

CORRELATION MATRIX