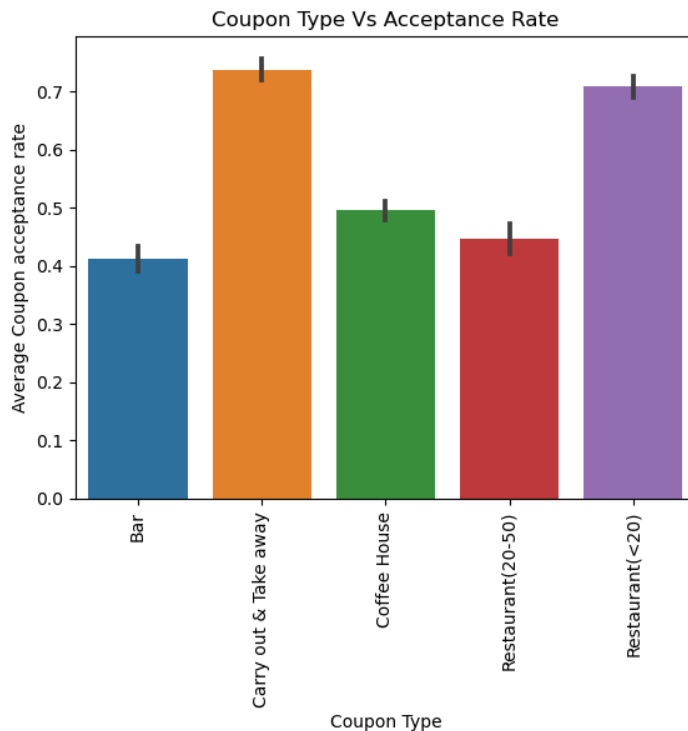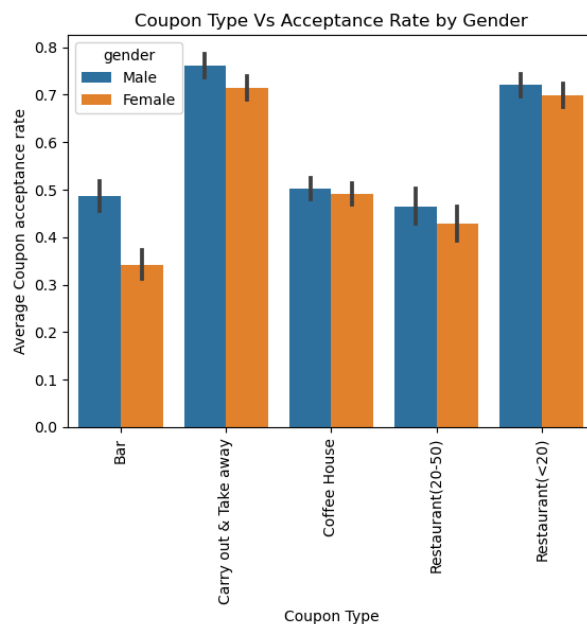# Bar Coupon Acceptance Analysis :

1. Overall acceptance rate of Bar Coupon is 41.19%, which is lower than overall all Coupon acceptance rate of 56.93%.

2. Male Bar coupon acceptance rate was around 10% hight than female, as shown in bar chart.

3. For all categories combined, most coupon's were issued at 80C, but Bar had most coupon issued at 55C. Also, for Bar acceptance rate was higest at 55C compared to others.
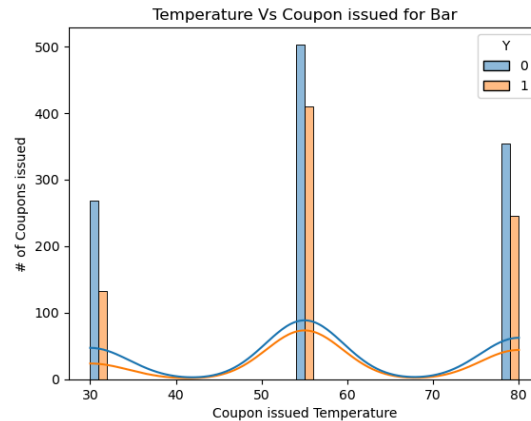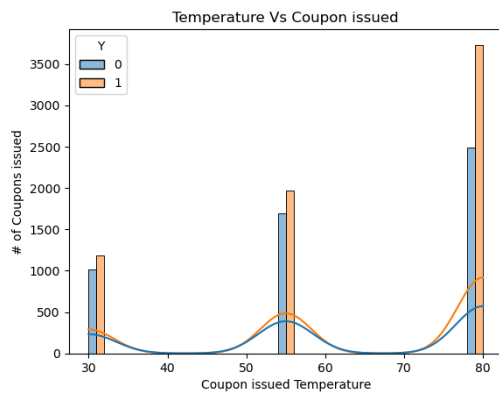
4. Coupon acceptance Rate for significantly higher for people who visited bar 4 or more times per month.
   Bar Acceptance Rate for those who went to bar 3 or fewer times a month : 37.27 %
   Bar Acceptance Rate for those who went to bar more than 3 times a month : 76.17 %

5. Bar coupon acceptance rate above 25 years is significantly higher when person was already going once a month to Bar.
   Bar Acceptance Rate for drivers who go to a bar more than once a month and are over the age of 25 : 68.98 %
   Bar Acceptance Rate for drivers who are not part of going to a bar more than once a month and above age of 25 33.77 %

Bar Coupon Acceptance Matrix

Bar Coupon Acceptance Findings¶

1. Male are more inclined to accept coupons. Male accepted around 10% more coupon's than female.
2. People visiting frequently, more than 3 times a month, are around 80% likely to accept coupon.
3. People above 25 years of age are more likely to accept coupon if they are vising atleast once a month.
4. Having kid as a passenger along with you significantly reduced chances of coupon acceptance.

Next stpes¶

1. look at the impact of travelling direction along with occupation to deteming best condition for acceptance rate.
2. look at Wether condition, marital status and traveller which includes partner to determine best acceptance rate.

Coffee House Coupon Acceptance Analysis:

1. Overall Coffee House acceptance rate is 49.63% compared to overall coupon acceptance rate of 56.93%
2. Age dependency when Coupon expiration in 2hours

When driver is below 21 years and coupon is expiring in 2 hours, for driver who is already visiting once a month, is 61.54%, significantly higher than above age 21, which is 51.27%
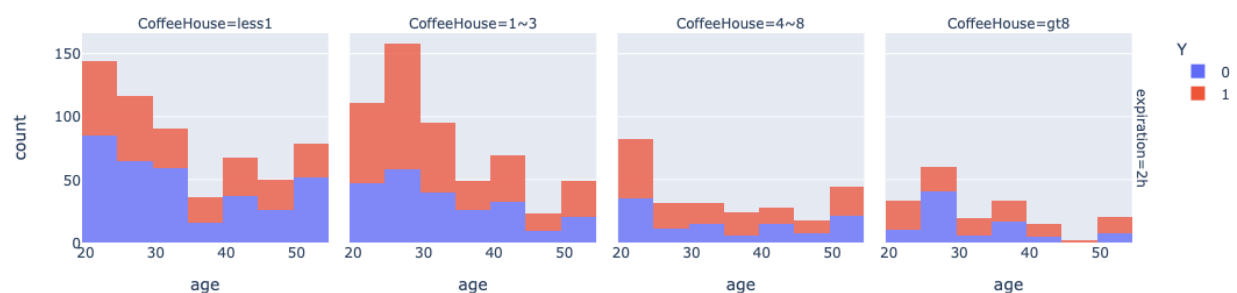
Coffee Coupon Acceptance Rate for one or more visit/month, age below 21 is 61.54 %
Coffee Coupon Acceptance Rate for one or more visit/month, age above 21 is 51.27 %

Further breakdown by number of visits/month can be seen in below plot.

Coupon accptance for younger than 21 (expiration : 2h)
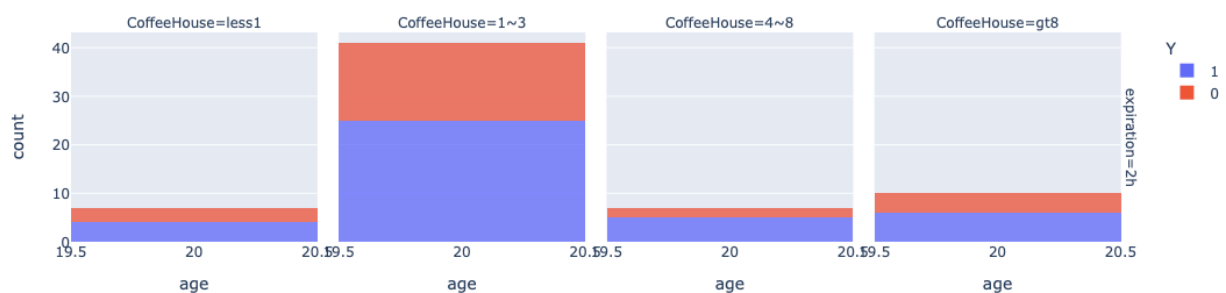
Coupon acceptance for 21 and older (expireation: 2h)

3. Compare coupon acceptance proportion When temperature is 30C and Weather is Sunny Vs Weather is snowy. Consider visits per month greater than 1.
• This evaluates weather impact for the same temperature of 30C
• Based on the acceptance rate below, you can say that people are more inclined to accept offer and visit Coffeehouse when weather is Sunny.

Coffee Coupon Acceptance Rate for when weather is Sunny and temperature is 30C : 71.43 %

 Coffee Coupon Acceptance Rate for when weather is Snowy and temperature is 30C : 42.81 %

4. If person has visited Coffee house more than 1 time in a month, location is within 5 mins, then compare same direction vs opposite direction proportion for 5 minutes traveling distance.
• Objective : determine the impact of traveling direction, if driver has to go out of route or Coffeehouse is in route.
• Results :
  • Driver is 10% more inclined to accept coupon if Coffeehouse is in route.
  •
Coffee Coupon Acceptance Rate for same direction in 5 mins for frequent visitor : 72.94 %
 Coffee Coupon Acceptance Rate for opposite direction in 5 mins for frequent visitor 64.33 %

Hypothesis
1. Younger than 21 drivers are inclined to accept more Coupons.
2. Drivers are more inclined to accept Coupon in Sunny weather compared to Snowy wether.
3. Drivers are more inclined to accept Coupon if Coffeehouse is in the same direction as they are traveling.

Next Steps :
1. Impact of Destination
2. Impact of income
3. Impact of occupation
4. Impact of passenger (if traveling with someone else.)